

# **DURALJAN VOCABULARY**

**LEXICAL SIMILARITIES IN THE MAJOR  
AGGLUTINATIVE LANGUAGES**

**by**

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## **ABSTRACT**

In order to provide material for further studies, especially for seeking the phonetic laws and for the reconstruction of the common protolanguage of the hypothesized DURALJAN superfamily, a word-list of cognate candidates in the five large families of the major agglutinative languages is presented. With 408 Finnish key-words there exists a cognate candidate from the Dravidian languages in 336 items, from Quechua in 315 items, from Japanese in 260 items, and from the Altaic languages in 240 items. In 104 items the Finnish key-word has a cognate candidate in all four other languages or language groups compared, in 152 items a cognate candidate in three other languages, and in 125 items in two other languages. Of the 408 Finnish key-words 394 has at least a Baltic-Finnic background, 202 a Finno-Ugric background, and 94 a Uralic background.

In the discussion a short survey of the morphological aspects of the major agglutinative languages was presented and first steps toward sketching the phonetic laws and the common protolanguage are taken. On the ground of the other last studies, an additional word-list with 60 sets of cognate candidates is also presented. The concordance with these studies is higher than  $p < 0.001$  level of statistical significance.

The author considers that the DURALJAN superfamily is identical with the eastern branch of Nostratic proposed by Illič-Svityč in 1965 but in addition to this, also includes the Japanese-Korean and the Andean-Equatorial families. Further large studies are needed not only on the area of the linguistics but also on the population genetics and archeology for confirming of the DURALJAN hypothesis.

**Key words:** Altaic, distant genetic relationships, Dravidian, DURALJAN superfamily, Finnish, Japanese, Mongol, Tamil, Quechua, Uralic

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I regret all the errors and misconceptions in this book. I take the responsibility for all of them. The vacillating orthography and romanization of many languages studied and the multitude of the diacritics have exceeded the capacity of not only my own but also our data processors and printers. Every translation between ADP-programs has destroyed a great amount of the diacritics and some of them must have been marked by hand.



## ABBREVIATIONS

A	= English
B	= Bender (1969)
DED	= Dravidian Etymological Dictionary (Burrow and Emenau 1984)
E	= Estonian
ED	= dialect of Estonian
F	= Finnish
FD	= dialect of Finnish
H	= Hungarian
J	= Japanese
Kan	= Kannada
M	= Mongol
OF	= Old Finnish
OJ	= Old Japanese
PA	= Proto-Altaic
PFP	= Proto-Fennic-Permic
PFU	= Proto-Finno-Ugric
PFV	= Proto-Fennic-Volgaic
PKJ	= Proto-Korean-Japanese
PQ	= Proto-Quechua
PU	= Proto-Uralic
Sw	= Swadesh (1955)
Tam	= Tamil
Tel	= Telugu
Q	= Quechua
QD	= Dialect of Quechua



## INTRODUCTION

In 1972 Anttonen called attention to surprising similarities between Finnish and Quechua, presenting a list of over 250 pairs of cognates. Some years later he reported that the word-pairs of Finnish and Quechua had numerous cognates also in the Dravidian languages (Anttonen 1978 a, 1978 b, 1979 a, 1979 b, 1979 c, 1980). Applying Bender's method of counting the number of accidental CVC and CV correspondences, Hakola (1989) demonstrated that five representatives from large families of agglutinative languages (Finnish from the Uralic, Tamil from the Dravidian, Mongol from the Altaic, Japanese from the Japanese-Korean and Quechua from the Andean-Equatorial family) had more similarities in the basic vocabularies than could have been expected by a mere chance. This finding was considered to support the hypothesis that those five language families were mutually related. For the hypothetical superfamily Hakola proposed the name DURALJAN. Recently, lending further support to the hypothesis of Hakola, Anttonen and Hakola (1994) published 40 sets of similar words meaning verbal expression selected from five families of the DURALJAN superfamily. Ten sets included juridical and administrative terms.

In order to provide material for further studies, especially for seeking the phonetic laws and for the reconstruction of the common protolanguage of the hypothesized DURALJAN superfamily, a more comprehensive word-list of cognate candidates in the five large families of the major agglutinative languages is presented here.

### Prosedure

The present author, whose native language is Finnish, searched the vocabulary of Dravidian languages (Burrow and Emenau 1989), that of Mongol (Lessing 1960), Turkic languages (Räsänen 1969), Japanese (Katsumata 1954, Sanseido's 1966) and Quechua (Parker 1969, Perroud and Chouvenec 1970, Middendorf 1970) for finding cognate candidates to Finnish key-words. In order to exclude similarities caused by chance, into the word-list only those cognate candidates were accepted which had counterparts from at least two other language groups. Exceptionally, e.g. for possible glottochronological calculations, a small number of word pairs are also included, where the similarity of sound has been more expansive than Bender's (1969) strict criterion implied or the similarity in meaning was at the level of the basic vocabulary presented by Bender (1969) or Swadesh (1955). Because of the difficulties in searching, word sets without a Finnish key word were not collected in the word-list. In the word-list, only the cognate candidates from Finnish, Estonian, Mongol, Tamil, Japanese and Quechua

were presented with a complete and systematic manner. From the other languages of the hypothesized DURALJAN superfamily cognate candidates have been presented e.g. for filling the gaps or for other complementary purposes. In order to exclude late loans, the remarks of the above-mentioned dictionaries were utilized.

In order to elucidate etymological background of the words collected, the following etymological dictionaries and works were utilized: Toivonen (1974), Toivonen et al (1958), Itkonen and Joki (1962, 1969), Itkonen et al (1975, 1978), Collinder (1977), Janhunen (1981) and Rédei et al (1986, 1988), in the case of Uralic family; Heuser and Sewket (1962), Clauson (1977) and Räsänen (1969), in the case of Altaic family; Martin (1966) and Miller (1971), in the case of Japanese-Korean family; and Parker (1969) in the case of Quechua. The reconstructed words of Proto-Fennic-Volgaic, Proto-Fennic-Permic, Proto-Finno-Ugric, Proto-Uralic, Proto-Altaic, and Proto-Korean-Japanese are presented in the notes connecting to the sets of cognate candidates. Because the differences between the words of Ayacucho Quechua and Proto-Quechua constructed by Parker (1969) were quite minor, the last-mentioned were not added. On the ground of all this material the writer has presented his own tentative suggestions for words of the hypothesized protolanguage of the DURALJAN superfamily. For the details of the words reconstructed see Discussion 111 - 117.

The sets of the cognate candidates have been presented in the alphabetical order of English according to the Finnish key-word. The order of languages in each set is as follows: 1. The tentatively reconstructed word of Proto-DURALJAN with remarks referring to Bender's and Swadesh' basic vocabularies. 2. Finnish, 3. Estonian and other Uralic languages, 4. Tamil and other Dravidian languages, 5. Mongol and other Altaic languages, 6. Japanese, 7. Quechua. Finally, notes and remarks are presented. They include the reconstructed words of interest.

In the Dravidian languages, Mongol and Japanese, the transliteration of the above-mentioned dictionaries were used. The orthography of all the languages studied is for the most part phonetic. In the case of Quechua, where the orthography varies, the English glosses refer to the work of Parker (1969) and Spanish glosses to the dictionary of Perroud and Chouvinc (1970).

## THE WORD-LIST

1. Proto-DURALJAN \**āne*- 'sound, to sound'.

F *āāni* 'sound', *āāntāā* 'to sound'.

Votic *āni* 'sound', H *ének* 'song'.

Tam *en*, Kan *en*, *ennu* 'to say' (DED 868).

M *anir* 'noise, sound'.

J *on* 'Ton, Laut'.

Q *anya*- 'to bark, to scold'.

Note PFU \**āne* 'Stimme, Laut' (Rédei et al 1986).

2. Proto-DURALJAN \**axa*- 'dry, to dry, to be parched'.

F *ahava* 'bitter wind (in the spring)', *ahavoitunut* 'weatherbeaten'.

E *ahav* 'dry wind in the spring'.

M *akira*- 'to dry, to dry up', *aysira* 'to dry, to congeal'.

J *aku* 'Übel, Böse, Schlechtigkeit'.

Q *aqu* 'sand', *ajo* 'arena', *ajwas* 'llaga, herida'.

See the group 7.

3. Proto-DURALJAN \**āiyā* 'father, old man' (B 26, Sw 43 'father').

F *āijā* 'father, old man'.

E *āi* 'father-in-law', Udmurt *aji* 'father, male'.

Tam *aiyaṇ*, Kan, Tel *aya*, *ayya* 'father, master, lord' (DED 196).

J *oya* 'Eltern, Vater, Mutter'.

Q *yaya* 'father, master, lord'.

Note the groups 4, 5, and 6 and PFP \**āje* 'gross, Vater' (Rédei et al 1986) and PKJ \**eř* 'agend (parent)' (Martin 1966).

4. Proto-DURALJAN \**āiōe* 'mother' (Sw 97 'mother').

F *āiti*, FD *āite*, *āitee* 'mother'.

E *eit* 'mother'.

Tam *āycci*, *āyi*, Malayalam *ācci* 'mother' (DED 364).

Turkish *aile* 'Frau, Familie'.

J *aite* 'Kamerad, Kameradin', *aisai* 'liebe Frau'.

These derivatives are not wholly identical. See the group 3 and note M *aīl* 'family, homestead, Q *ayīū* 'relative, family, community' and Old German *aiōi* 'mother'

5. Proto-DURALJAN \*aya- a) 'to copulate, to make love'.

F *ajaa* a) 'to cover (of boar)'.

Old Turkish *aya-* 'to honour'.

J *ai* 'Liebe', *ayasu* 'liebkosen'.

Q *ayui* 'adulterio'.

Note OF *ajattara* 'a femaly fairy seductress of hunters in the forest' (verbatim, 'one who tempt to copulate'), F *aimo* 'proper, able, grown-up', FD *aittua* 'to become pregnant (of cow)', *äityä* 'to become excited', and further Chi *ài* 'Liebe', and the groups 3 and 4.

6. Proto-DURALJAN \*aya- b) 'to chase, to drive'.

F *ajaa* b) 'to chase, to drive'.

E *ajada* 'to drive', Hanti *oj-* 'to flee, to run out'.

Kan *ay* 'to come, to obtain, to arrive at', *ayana* 'goying, moving'.

M *ajala-* 'to travel'.

J *ayumi* 'das Gehen'.

Q *aiway* 'ir, marchar', *aijey* 'huir, escape, correr', *ayqi-* 'to flee'.

Note PFU \**aja-* 'to drive, to chase' (Rédei et al 1986), Sanskrit *aj-* 'to drive, and Latin *agere* 'to do'.

7. Proto-DURALJAN \*aka 'feces, dirt, husk'.

F *akana* 'husk, chaff'.

E *agan* 'husk, chaff'.

M *ay-a* 'bran, strong odour', *ayala-* 'to remove husk or bran'.

J *aka* 'feces, dirty'.

Q *aka* 'feces, dirty', *aqsai* 'mal, mavado, perverso'.

Note that F *akana* is a derivative. It is considered a Baltic loan.

8. Proto-DURALJAN \*akka 'old woman'.

F *akka* 'old woman'.

Lappish *akku* 'grandmother', Mari *aka* 'older sister'.

Tam *akkā*, Kan *akka* 'elder sister'.

M *ay-a* 'lady, dame', *eke* 'mother, maternal'.

Q *age*, *a'ke* 'suegra del hombre' (Middendorf 1970).

9. Proto-DURALJAN \*äke 'hot, fierce, angry', (B 91, Sw 179 'warm').

F *äkkiä* 'suddenly, unexpectedly, presto', *äkeä*, *äkäinen* 'angry, fierce', *äksy* 'fierce, troublesome'.

E *äge* 'fierce, fury, furious, hateful', *äkki* 'suddendly', H *ég* 'to burn, to glow'.

M *aysum* 'fury, rage, furious', *ayali*, *ayasi* 'character, temper, nature', Old Turkish *ak* 'hateful'.

J *okoru* 'zornig werden', *okoru*, *okosu* 'entbrennen, entflammen', *akkenai* 'zu schnell, zu wenig', *akki* 'der böse Geist, Teufel'.

Q *akatariay* 'hacer pronto, ligero una cosa'.

Note PKJ \*(a-)tata-ka (-p-) 'hot' (Martin 1966).

10. Proto-DURALJAN \**e*le 'no, not', (B 59, Sw 107 'no').

F *älä* 'don't'.

E *ära* 'don't'.

Tam *illai* 'it is not, no', *il* 'non-existence, death', *al* 'to be not so-and-so', Kan *illa* 'no, not', Malayalam *alla* 'is not that' (DED 234, 2559).

M *yly* 'don't' (negation preceeding verbs).

J *iie* 'don't'.

Q *illay* 'faltar', *ĩä-* 'to be absent, to be far away'.

Note PU \**e-/3-* 'Verneinungsverb' (Janhunen 1981).

11. Proto-DURALJAN \**ämmä* 'mother, wet nurse'.

F *ämmä* 'old women', OF *amma* 'mother, wet nurse'.

E *ämm* 'mother-in-law'.

Tam *ammā*, Kan *amma* 'mother, matron'.

Q *amacay* 'amparar, defender, favorcer, apagar'.

Note PIE \**amma* and the groups 12, 26, 48, and 49.

12. Proto-DURALJAN \**am-* 'to suck, to eat', (B 22, Sw 37 'to eat').

F *ammo* 'agape', *ahmia* 'to gorge'.

E *ammuli* 'agape', Selkup *ámma* 'to yawn'.

Tam *uṇ*, Kan *umbu* 'to eat, eating' (DED 600).

M *ama(n)* 'mouth'.

Q *amu-* 'to hold in the mouth'.

13. Proto-DURALJAN \**ampu-* 'to shoot'.

F *ampua* 'to shoot', *ammus* 'charge, projectile, ammunition'.

E *ambu*, *ammu* 'bow', *ammurik* 'rainbow', Udmurt *ibini* 'to shoot'.

Tam *ampu*, Kan *ambu* 'an arrow', Tam *ampuli* 'moon' (DED 178).

J *yumi*, 'Bogen, Bogen schießen'.

QD *amarun* 'arcoiris'.

Concerning the difference of the meanings note F *kaari* 'curve, arc, bow' and Kui *keeri* 'arrow'. (DED 1932) Note also PFP \**ampɜ*- 'werfen, schiessen' (Rédei et al. 1986).

14. Proto-DURALJAN \**aŋsa* 'trap, cavity'

F *ansa* 'trap'.

E *aas* 'trap'.

Kannada *ana* 'the mouth' (DED 114).

M *ang* a) 'wild animal, hunting, game', b) 'hole, cavity, pit'.

J *ana* 'hole, cavity, pit'.

Q *ankuta*- 'to bind the legs'.

Note J *antan* 'dark, obscure' and Q *anta* 'unclear, cloudy, copper'. Note also PU \**aŋe* 'Öffnung' (Rédei et al 1986) and PKJ \**anx(a)* 'interior' (Martin 1966).

15. Proto-DURALJAN \**apara* 'late-born child or animal'.

F *äpärä* 'illegitimate child, late-born animal, second crop of hay', *apara* 'the lean part of wort in bearmaking'.

E *äbarik* 'weak, poor, late born animal'.

Kan *apara* 'posterior, later, following, inferior'.

Old Turkish *aba:ci* 'bogy'.

J *obake* 'Gespenst', *abare* 'uneducated rascal'.

Q *apra* 'adopted son'.

16. Proto-DURALJAN \**apia* 'mushy, soft, depressed'.

F *a pea* 'depressed, melancholic'.

Karelian *apie*, *abie* 'sorrow, displeasure'.

J *obieru* 'sich bängen, aufschrecken'.

Q *apya* 'mushy'.

Note that F *a pea* is considered a Slavic loan.

17. Proto-DURALJAN \**appi* 'father-in-law'.

F *appi* 'father-in-law'.

Karelian *appi*, H *ip*, Mansi *up* 'father-in-law'.

Tam *appu*, Kan *apa*, *appa* 'father' (DED 156).

M *aba* 'father', *abay-a* 'paternal uncle', *abuyai* 'a title of respect', Old Turkish *aba*, Turkish *apa* 'ancestor',.

J *ō* 'König, Monarch'.

Q *apu* 'amo, dominador, curaca principal' (Middendorf 1970).

Note PU \**jppj* 'Schwiegervater' (Janhunen 1981).

18. Proto-DURALJAN \**apu* 'help, support, means'.

F *apu*, avustus 'help, aid, support', *auttaa*, *avustaa* 'to help, to support', *äveriäs* 'rich'.

E *abi* 'help, aid, support'.

Kan *āpu* 'an object to lean, protection' (DED 408).

J *ōu*, OJ *opu* 'bedecken, to cover'

M *abura-* 'to save, to help, to protect'.

Q *apu* 'rich', *apta-* 'to distribute food or coca'.

19. Proto-DURALJAN \**ar-* 'to hurt, to mishandle'.

F *aristaa* 'to favor', *arka* 'tender, shy', *arpi* 'scar'.

E *arg*, H *árt* 'to damage, to hurt'.

Tam Kan *ari* 'to be mutilated, to be ruined, to perish', Tam *ari* 'to cut off' (DED 212, 277).

M *arya-* 'to become dry or stale'.

J *aradateru* 'Gewalt antun', *areru* 'verwüsten'.

Q *arkai* 'embarazo'.

See the groups 2 and 21. There is possible contamination with the groups 2, 7, 20 and 21. Note PFU \**ar3-* 'reissen, zerreißen' (Rédei et al 1986).

20. Proto-DURALJAN \**ar3* 'steppe'.

F *aro* 'steppe, prairie'.

E *aru a* 'steppe, prairie', Komi *araj* 'swamp'.

Tam *aral* 'black sand', Kan *aril*, *arlu* 'mud, clay' (DED 312).

M *aray* 'dry bed of a river or brook'.

J *arechi* 'Wüste'.

See the groups 2 and 19 and note PFU \**ar3* 'wässerige, sumpfige Stelle' (Rédei et al 1986).

21. Proto-DURALJAN \**arpa-* 'to sacrifice, to make magic'.

F *arpa* 'lot, chance', *arpoa* 'to cast lots', *arvata* 'guess, divine, anticipate', FD *arba* 'to anticipate'.

E *aru b* 'intellect, reason, mind, understanding', Mari *arbu* 'shaman, magician', H *orvos* 'physician'.

Tam *ari*, Kan *ari* 'to learn, to know, to understand' (DED 314).

M *arbis*, arwis 'knowledge, erudition', Old Turkish *arva-*, *arba* 'to make magic, to cast spells', Yakut *arba* 'to sacrifice'.

J *arawa* 'offen, öffentlich, direct', *araware* 'Zeichen, Symptom', *arawareru* 'erscheinen, sichtbar werden', *uranau* 'to divine, to forecast, to augur, to tell fortunes'.

Q *arpay* 'sacrificar, hacer sacrificios con sangre de animales'.

Note the group 19, PFU \* *arpa* 'irgendein Zaubermittel' (Rédei et al 1986) and PKJ \**ař(a)* 'mark' (Martin 1966).

22. Proto-DURALJAN \**aci-* 'to step'.

F *astua* 'to step', F *askel* 'step'.

E *astuda* 'to step', *askeldada* 'be doing something'.

M *φskele-* 'to step on, to kick'.

J *ashi* 'to step, to walk'.

Q *iči* 'to step, to walk'.

Note the group 54 and the set Tam *aři* 'foot, Tel *ařugu* 'foot, footstep' (DED 72), J *ashi* 'Fuss' and Q *ataka* 'foot'. Note also PU \* *aške, ačke* 'Schritt' (Rédei et al 1986) and PKJ \**vašyi* 'foot' (Martin 1966).

23. Proto-DURALJAN \**asu-* 'to dwell, to reside, to encamp'.

F *asua* 'to live, to dwell', *asema* 'position, place, stead, situation, state, condition, status, station', *asento* 'position, posture', *ase* 'weapon, tool, implement, instrument'.

E *asuda* 'to dwell', Mordvin *ežem, ižim* 'place, position', Selkup *esy-* 'become, start'.

J *asobu* 'spazieren gehen, bummeln, unterhalten', *asoko* 'jener Ort, jener Platz', *asaru* 'Jagd machen'.

Q *asu-* 'to move back, to move over', *asuyku-* 'to approach from a very short distance', *asti-* 'to take or give fire', *asta-* 'to transport, move many things from one location to another far away'.

Note PU \**aše-* 'stellen, setzen, legen' (Rédei et al 1986), and the set F *asettaa* 'to place, to put etc', *asetus* 'statute', Q *asuy b)* 'apartarse, aplazar'.

24. Proto-DURALJAN \**api-* 'marriage'.

F *avioliitto* 'marriage', *aviopari* 'married couple'.

E *abi-* 'matrimony, marriage'.

M *abayali* 'first wife'.

J *obekka* 'Schmeichelei, Liebedienerei'.

Note the group 18 and PU \**apɜ* 'ältere weibliche Verwandte' (Rédei et al 1986).

25. Proto-DURALJAN \**elä-* 'to live', (Sw 90 'to live').

F *elää* 'to live'.

E *elada*, H *él*, Yurak-Samoyed *jille* 'to live'.

Tam *iru* 'to live, to exist' (DED 480).

M *ylzi-* 'to live'.

J *iru* 'sein, existieren'.

Note PU \* *elä-* 'leben' (Janhunen 1981, Rédei et al 1986).

26. Proto-DURALJAN \**emä* 'mother, dam', (Sw 97 'mother').

F *emo* 'mother', *emä* 'dam'.

E *ema* 'mother', H *eme* 'female of animal', Tavgi *emme* 'mother'.

Kan *emme* 'female buffalo' (DED 816).

M *em-e* 'woman, wife, female', Old Turkish *oma*: 'mother', Yukagir *emei* 'mother'.

J *umi* 'leibliche Mutter'.

Note PU \* *ämä/emä* 'Mutter' (Janhunen 1981) and PKJ \**eme* 'mother' (Martin 1966).

27. Proto-DURALJAN \**enne* 'omen, sign'.

F *enne* 'omen, sign', *ennustaa* 'to predict'.

E *enne* 'omen, sign', *ennustada* 'to predict'.

Tam *en̄nu* 'to think, to consider, to determine', Kan *en̄nu* 'to count, to think' (DED 793).

J *en* 'Schicksal, Karma'.

Note the group 1.

28. Proto-DURALJAN \**enā* a) 'uncle, older brother'.

F *eno* a) 'maternal uncle'.

E *onu* 'uncle, maternal uncle', Udmurt *riurā* 'elder brother, maternal uncle', Tavgi *rienne* 'elder brother'.

Tam *aṇṇaṇ*, Kan *aṇa*, *aṇṇa* 'an elder brother' (DED 131).

M *anai* 'friend, sworn brother'.

J *ani* 'der ältere Bruder'.

Note PU\* *an3* (*on3*) 'gross, viel' (Rédei et al 1986).

29. Proto-DURALJAN \**enā* b) 'great river, great lake, great'.

F *eno*, *enā* b) 'great river, stream', *Inari*, *Unari*, *Unnukka* 'some names of great lakes', *enemmān* 'more'.

E *enam* 'more', Komi *una* 'Menge, viel'.

Tam *aṇai* 'enbankment, dam' (DED 122), *puṇal*, *puṇai* 'water, flood, river', Malayalam *punal*, *puṇal* 'water, river' (DED 4338).

J *unabara* 'das weite Meer', *uneru* 'wogen'.

Q *unu* 'water'.

Note PU \**enā* 'gross, viel' (Rédei et al 1986).

30. Proto-DURALJAN \**wasi* 'house, dwelling'.

F *haasia* 'drying frame'.

E *aas* 'drying frame', Mari *waž* 'root, origin, race, family', H *ház* 'house'.

Kan *vāsa* 'house, habitation, dwelling, resting, living' (Bhat 1971).

Turkish *vatan* 'Vaterland'.

Q *wasi* 'house, dwelling, building'.

Note the Nostratic connection.

31. Proto-DURALJAN \**xaca-* 'to challenge'.

F *haastaa* 'to challenge, to summon, to pick a quarrel, to speak, to talk'.

E *aasta* 'to learn, to warrant'.

Kuwi *āst* 'to speak up, to resound' (DED 344).

Q *qaqča-* 'to scold, enojarse'.

See Anttonen and Hakola 1994.

32. Proto-DURALJAN \**xaxca* 'leader'.

F *haka* 'leader (colloquial)'

M *xayan* 'Great Kahn'.

J *haken a)* 'Hegemonie', *haki* 'Ehrgeist'.

Q *jajcha* 'brioso, animoso, respetado por su gravedad, cara que se impone por su severidad, que infunde respeto, temor'.

See the group 35.

33. Proto-DURALJAN \**xaka-* 'to chop, to crack, to break', (Sw 148 'to split').

F *hakata* 'to chop, to hew, to hew down'.

E *hakata* 'to begin', Udmurt *šukkini* 'to chop, to beat'.

Kan *haccu* 'to gut into small pieces, as vegetables' (DED 46).

M *xayara-* 'to break, to crack, to crash', *xaya-* a) 'to break, to split, to investigate',

Turkish *haklamak* 'besiegen, liquidieren'.

J *hakai*, *haki* 'Zerstörung, Vernichtung'.

Q *čaquy* 'to destroy, to chop down, to cut'.

These words have a strong onomatopoeitic character. Note the groups 31, 32, 34, and 35, and such words as G *hacken*.

34. Proto-DURALJAN \**xaku a)* 'anything chopped'.

F *hakkelus* 'chopped straw, chaff, meat', *hake* 'flags, chips'.

E *hakkliha* 'ground meat'.

Kan *hakkalu* 'the state being separated or more or less apart' (DED 3811).

Q *jaku* 'harina'.

These words are probable variations and derivatives of the words in the group 33.

35. Proto-DURALJAN \**xaku* b) 'chase', (Sw 176 'to hunt').

F *haku* 'chase', *hakea* 'to hunt, to seek for'.

E *hagijas* 'hound'.

M *xaya*- b) 'to investigate'.

J *haken* b) 'Absendung, Abschickung'.

Q *čaqu* 'to beat (in hunting)', *chaku* 'caza', *haku* 'let's go'.

See the group 33.

36. Proto-DURALJAN \**caŋka* 'branch, leg'.

F *hanka* 'branch, branch between thumb and forefinger', *hanko* 'fork', *sanka* 'handle'.

E *hang* 'fork'.

Kan, Telugu *paṅga* 'forked branch of a tree' (DED 3818).

J *han* 'limb, fork, carlock, half'.

Q *čanka* 'leg, inside of thigh, to step, to pace'.

Note PFP \**caŋka* 'Haken' (Rédei et al 1988).

37. Proto-DURALJAN \**xarka* 'bull, draft ox'.

F *hārkā*, 'ox, bull, esp. draft ox'.

E *hārg* 'ox, bull'.

Kan *ēru*, *ār*, Kuwi *hēru* (pl. *hērka*) 'pair of oxen yoked to a plough' (DED 2815).

M *sar* 'ox'.

Q *harka*- 'to detain, to tie up (animals)'.

Note the pair F *aura*, FD *aatra* and Tam *ēr*, Malto *are* 'plough' (DED 2815).

38. Proto-DURALJAN \**xawa*- 'to watch, to observe'.

F *havaita* 'to observe, to see, to find out, to discover'.

Karelian *havaičču* 'ibid.'.

Tam *kā*, Konda *ka.v* 'to watch, to guard', Tam *kāval* 'watching', Kan *kāpu*, *kāha* 'guarding' (DED 1416).

J *gawa* a) 'Zuschauer, Outsider'.

Q *qawa*- 'to watch, to look at'.

Note the groups 63 and 68.

39. Proto-DURALJAN \**cejta*- 'to throw, to cast, to fling' (Sw 170 'to throw').

F *heittä* 'to throw, to cast, to fling', *heitto* 'cast, hurl'.

E *heida*, Lappish *sittet* 'to throw'.

Malayalam *cāṭuka* 'to throw', *cāṭṭu* 'a hurl' (DED 2439).

J *suteru* 'wegwerfen'.

Q *sitay*, *jitay* 'arrojar, botar, lanzar'

Note PFP \**šajitta*- 'werfen, schleudern' (Rédei et al 1988).

40. Proto-DURALJAN \**ceŋke* 'breath, spirit', (Sw 18 'to breathe').

F *henki* 'breath, spirit, ghost, person', *hengittää* 'to breathe', *hinku(yskä)* 'whooping cough'.

E *hing* 'breath, spirit, ghost', Mari *tsin* 'smoke'.

Tam *ēnkal* 'asthma in children', Tulu *señkelù* 'breathing quickly' (DED 2804).

J *en'en* '(schwer) atmen'.

Note PFU \**čeŋke* 'Dampf, Dunst / warm, Wärme' (Rédei et al 1986).

41. Proto-DURALJAN *cin-* 'value, price'.

F *hinta* 'price, charge, cost, rate'.

E *hind* 'price'.

M *yn-e* 'price, value, cost', *ynen* 'truth, true'.

J *hin*, *hin'i* 'value, worth'.

Note the groups 40 and 50 and PFV \**čanta* 'Preis, Wert' (Rédei et al 1988).

42. Proto-DURALJAN \**xoiwa-* 'to care, to protect'.

F *hoiva* 'care, protection', *hoitaa* 'to care, to protect'.

E *hoid* 'care, protection'.

Tulu *jōpane* 'care', Kota *joyk* 'carefulness' (DED 2871).

J *hoy-* 'method of treatment, Gesundheitspflege', *hoiku* 'Pflege', *hoyū* 'Besitz, das Behalten'.

Q *uyway*, *oiway*, 'criar', *uywača-* 'to domesticate'.

43. Proto-DURALJAN \**iki-/ake-* 'to open, to perforate'.

F *ikkuna*, *akkuna* 'window', *auki* 'open'.

E *aken* 'window'.

M *egyde* 'door'.

J *ikinuki* 'breathinghole, Lüfter', *akeru* 'öffnen, bohren'.

Q *ikiy*, *ikay*, 'abrir, cortar'.

Note the pair F *iki-*, *ikuinen* 'everlasting, eternal' and M *egyri* 'long time, ancient' and PKJ

\**ak-* 'to open' (Martin 1966). F *ikkuna* is said to be a Slavic loan.

44. Proto-DURALJAN \**ĩĩ* 'rot, pus'.

F *iljettävã* 'to nauseate, to loathe', *iljanne* 'slippery', *ilkeã* 'loathsome'.

E *ila* 'drivel, slaver', *ilge* 'loathsome'.

Tam *ilaku* 'to grow soft, to liquefy', *ĩai* 'phlegm, asthma', Malayalam *ĩa* 'phlegm, saliva, spittle' (DED 510).

M *ilzara* 'to rot, to decay'.

Q *ĩĩ* 'infection, running sore', *ilakiay* 'vomitar'.

45. Proto-DURALJAN \**ilĩ* 'to deride'.

F *ilkkua*, *ilveillã* 'to deride, to fret'.

Tam *ilĩ* 'derisive laughter', Malayalam *ilika* 'to fret' (DED 511).

Note the group 52 and PKJ \**óld(ó)* 'to menace' (Martin 1966).

46. Proto-DURALJAN \**ilo* 'light'.

F *ilo* 'joy, delight', OF *ilo* 'light'.

E *ilu* 'beauty'.

Tam *ilakũ* 'to shine', *ila*, *ilam* 'young, tender', *el*, *elli* 'sun, daytime' (DED 829).

M *ilele* 'to make clear'.

J *iro* 'Liebe, Wollust, Farbe'.

Q *ĩã* 'star', *ĩari* 'to dawn'.

47. Proto-DURALJAN \**ima* 'to flatter'.

F *imarrella* 'to flatter'.

M *amara* 'to love'.

J *amaeru* 'schmeicheln'.

Note the group 49.

48. Proto-DURALJAN \**imi* 'to suck' (Sw 156 'to suck').

F *imeã* 'to suck'.

E *imeda* 'to suck'.

Tam *umi* 'to suck', *ũmpu* 'to suck' (DED 2621b).

Old Turkish *em* 'to suck'.

Q *umi* 'to feed from beak to beak'.

These words may be imitative. Note, however, PU \**imi* 'saugen' (Janhunen 1981).

49. Proto-DURALJAN \**ima/ama* 'sweet'.

F *imelã* 'sweet'.

E *imal* 'sweet'.

Tam *igpu* 'sweetness', Kan *immu*, *imbu* 'sweetness' (DED 530).

J *amai* 'sweet'.

Note the group 48 and PKJ \*(a)ma- 'flavor' (Martin 1966).

50. Proto-DURALJAN \**inti* 'sun'.

F *into* 'enthusiasm, power, ardour, fervour, trance of a shaman'.

E *ind* 'enthusiasm, rut, heat'.

Telugu *enda* 'sunshine, sun', Kan *ina* 'master, lord, king, sun, universal soul' (DED 869).

M *engger* 'southern slope of a mountain or hill', *engkezing* 'paradise', *ynen* 'truth, true'.

J *hinata* 'sunny place, sunny'.

Q *inti* 'sun', *iñi-* 'to believe in'.

51. Proto-DURALJAN \**iri-/-uri-* 'to cry'.

F *iristā*, *urista* 'to cry', *suru* 'sorrow'.

E *iriseda* 'to cry'.

Tam *irai*, *aṛu* 'to cry out (as in anger)', Kan *ura* 'crying' (DED 489, 282, 648).

M *orila-* 'to cry out, to shout', Turkish *ürüme* 'heulen'.

J *urei* 'sorrow, anxiety, trouble', *orabu* 'to howl, to cry'.

Q *irki*, *irqi*, *irqe*, *erqe* 'crybaby, coddled baby, spoiled by coddling'.

Note that Q *irkisqa* 'a child weaned badly because of the mother's incontinence', *erque* 'little boy' are derivatives and possibly also Mari *erge* 'son', Kurux *erkhos*, Malto *erqo* 'husband's younger brother'. Note also F *irrottaa*, *erottaa* 'to loose, to separate', F *ero* 'separation', Tam *ira* 'to loose' and PFU \**irkä* (ürkä) 'Mann, Sohn, Knabe' (Rédei et al 1986).

52. Proto-DURALJAN \**irwai-* 'to make grimaces'.

F *irvistää*, *irvailla* 'to make grimaces'.

E *irvida*, *irvitada* 'to make grimaces'.

M *irbai-* 'to make grimaces, grimace'.

J *iraira* 'gereizt werden', *iradateru* 'erzürnen'.

Note the set F *ilves*, E *ilves*, M *irbis* 'lynx'.

53. Proto-DURALJAN \**ice* 'father, great' (B 26, Sw 43 'father').

F *isā*, *iso* 'father', *iso* 'great, big'.

Lappish *ačče*, Mansi *ääč'i* 'father', H *ös* 'ancestor'.

Tam *accan* 'father' (DED 50).

M *ecige* 'father', Turkish *āci* 'older brother'.

J *osa* 'chief, head', *osameru* 'to rule'.

54. Proto-DURALJAN \*isku- 'to strike'.

F *iskeā* 'to strike'.

E *iskeda* 'to lurk'.

Konda *is-* 'to strike' (DED 425).

M *iskyl-* 'to trapple under one's feet, step on kick'.

Q *isku-* 'to shell (grain)'.

Note the set 22.

55. Proto-DURALJAN \*ya 'and', (Sw 2 'and').

F *ja* 'and'.

E *ja* 'and'.

Tam *i* 'and' (DED 416).

J -*ya-* 'und, oder'.

Q *ja* 'y'.

Note also the set Telugu *mari*, Kan *bari* (DED 4766), M *ba*, Q *pas* 'and'.

About other particles, note the pairs F *jos*, J *yoshiya* 'if', (Sw 80 'if') and F *jo*, Q *ña*, 'already'.

56. Proto-DURALJAN \*yaka- 'to divide, to distribute'.

F *jakaa* 'to divide, to distribute'.

E *jagada*, Mari *juknì* 'ibid', Tavgi *jagi'ema* 'to cut a reindeer into pieces'.

Kan *yakku* 'to divide', Tam *vaku* 'to divide, to distribute' (DED 5202).

J *yakusū* 'divisor, Teiler'.

Q *chajay*, *ta'jay* 'distribuir comida', *t'akay* 'distribuir' (Middendorf 1970).

Note PU \**jaka-* 'teilen, scheiden, trennen' (Rédei et al 1986).

57. Proto-DURALJAN \*yoki 'river' (Sw 119 'river').

F *joki* 'river', *juka* 'waterfall'.

E *jōgi* 'river', Yenisei-Samoyed *joha*, *jaha* 'river', Hanti *jygi* 'small river'.

Kan *jōgu* 'waterfall' (DED 2872).

Q *yaku* 'water, juice'.

Note Koraga *jōku* 'to wash' and PU \**jukā* 'Fluss' (Janhunen 1981).

58. Proto-DURALJAN \*yuma 'God, god, deity'.

F *jumala* 'God, god, deity, divinity'.

E *jūmal* 'ibid.', Mari *jumo* 'heaven, the highest god'.

Kan *yama* 'Yama'.

J *yemma* 'the king of Hades'.

Q *yumay* 'crear, derramar el semen con sin union carnal', *yuma*, *jumai* 'semen del varon o del macho', *yumaq* 'padre, el que engendra'.

Note the hypothesis of Anttonen (1979a) and PFV *\*juma* 'Himmel, Gott' (Rédei et al 1988).

59. Proto-DURALJAN *\*yumo* 'magic effect (of poison etc.)'.

F *jumoava* 'adstringent taste', *jomottaa* 'to ache (slightly)'.

E *jumetada* 'to use rouge'.

Telugu *jumjum* 'dumbness, sleeping of the limb', Kan *jum*, *jumy*, *juma*, *jumu*, *jummu* 'sound used in sensation of coldness or chill of the taking effect of poison'.

J *yamu* 'erkranken, aufhören, enden'.

Q *yumaikui* 'picar de abeja'.

Note the set 58.

60. Proto-DURALJAN *\*yuru* 'slow'.

F *juroa* 'to develop slowly'.

Tam *ūr* 'to move slowly'.

J *yuruyuru* 'langsam'.

Note the set 62 and PKJ *\*nór* 'slow' (Martin 1966).

61. Proto-DURALJAN *\*yut-* 'to talk, to chat'.

F *juttu* 'store, anecdote, case (in law)', *jutella* 'to talk, to chat, to narrate'.

E *jutt* 'store, anecdote, tale', Mordvin *joytams* '\*to tell, to order'.

Kan *yukta* 'trick, skill, art, in law, enumeration of circumstances' (Bhat 1971).

M *joyta* 'allegorical, metaphorical', Turkish *jutturmak* 'mit Anspiegelungen necken'.

J *yatsu* 'rascal', *yatsusu* 'disguise oneself', *ayatsuri* 'to manipulate'.

Q *yukay* 'burlarse'.

Note PFV *\*jukta-* 'sprechen, erzählen' (Rédei et al 1988).

62. Proto-DURALJAN *\*yura* 'root, origin', (B 66, Sw 121 'root').

F *juuri* 'root, origin'.

E *juur*, Mordvin *jur* 'root'.

Tam *vēr*, Malayalam *vēr*, Tulu *bēru* 'root, origin, cause' (DED 5535).

Turkish *yurt* 'Heim, Heimat, Vaterland', M *ger* 'yurt'.

J *yurai* 'origin, genesis'.

Q *yura* 'plant, place of origin, raiz de planta'.

63. Proto-DURALJAN \**kāpa*- 'to capture'.

F *kaapata* 'to capture'.

E *kaabata*, H *kap* 'to capture'.

Kan *kabbila* 'hunter' (DED 1227).

M *xabuci* 'skillful hunter'.

Q *hapi*- 'to catch, to hold'.

Note the groups 68 and 126 and the Nostratic connections.

64. pDURALJAN \**kere* 'snake', (B 76, Sw 144 'snake').

F *käärme* 'snake'.

ED *kärm*, *kärv*, Lappish *kärbmas*, *kärvas* 'snake'.

Tam *cārai*, *cērai*, Kan *kēre* 'rat snake' (DED 2011).

M *gyrbel* 'lizard', *gyrbelze*- 'to move as like a snake'.

J *ja* 'snake'.

Q *kuru* 'worm', *uru* 'serpiente, gusano'.

Note that F *käärme* has been considered to be a Baltic loan.

65. Proto-DURALJAN \**kosa*- 'to join, to marry'.

F *kaaso* 'bridesmaid', *kosia* 'to propose', *kosija* 'suitor'.

E *kaasa* 'spouse, mate'.

Kan *kaccu* 'to join' (DED 1094).

Turkish *koca* 'a husband'.

J *kazoku* 'Familie, Mitglieder der Familie'.

Q *qusa* 'husband', *kusakana* 'novio'.

66. Proto-DURALJAN \**kāsa* 'white frost, rime' (B 15, Sw 22 'cold').

F *kaasu* 'rime, white frost'.

E *kahutada* 'to congeal, to get chilled'.

Kui *kaja* 'to be congealed' (DED 1102).

M *casu(n)* 'snow'.

J *kasumi* 'mist, fog'.

Q *qasa* 'frozen, freezing, to freeze', *jasay* 'helar'.

Note the group 69 and PFP\* *kāc3* 'kalt werden, sich erkälten' (Rédei et al 1988).

67. Proto-DURALJAN \**kāt*- 'to upset, to fell, to kill'.

F *kaataa* 'to upset, to fell, to kill, to conquer'.

ED *kaaduma* 'to fell'.

Tam *kātu* 'to kill, to murder', Kan *kādu* 'to war' (DED 1477).

J *katsu* 'besiegen, siegen, schlagen'.

Q *qati-*, *kačay* 'to hunt', *qati-* 'to drive animals'.

Note PU \* *kađa* 'lassen, bleiben' (Redei et al 1986).

68. Proto-DURALJAN \**kāwa* 'mould, model'.

F *kaava* 'model, pattern, design, mould'.

E *kava* 'ibid', H *kéb* 'figure'.

Tulu *kōvē* 'mould', Tam *kuvail*, Malayalam *kuva*, Kan *kōve* 'crucible', Kan *kōva*, *kuvara* 'potter' (DED 1816, 1762).

M *keb* 'model, pattern, type form, shape, mould', Old Turkish *ki:b* 'mould, model'.

J *gawa b)* 'outside'.

Q *hawa* 'outside, topside'.

Note the group 38.

69. Proto-DURALJAN \**kaxa* 'ice, frost, concealed', (B 15, SW 22 'cold').

F *kaho*, *kahi*, *kahma*, *kohva* '(crusty) ice, frost', *kohma* 'numb with cold'.

E *kahu* 'frost', *kahmetuda*, *kohmas* 'be numb with cold'.

Kui *kaja(kaji-)* 'to be congealed by growing cold', *ganja* 'to coagulate', Kuwi *kajali* 'to become congealed' (DED 1102).

M *yaca-* 'to freeze'. Turkish *kaj* 'Regen mit Schnee gemischt',

J *kaze* 'wind'.

Q *kajay* 'helar'.

Note also the set 66.

70. Proto-DURALJAN \**kakte* 'two', (B 90, Sw 176 'two').

F *kaksi (kahte-)* 'two'.

E *kaks*, H *két*, Yurak-Samoyed *site* 'two'.

Old Turkish *iki*, *iski* 'two', M *xos* 'pair'.

Q *iskay* 'two'.

Note PU \* *kektä/käktä* 'zwei' (Janhunen 1981).

71. Proto-DURALJAN \**kala* 'fish' (B 28, Sw 49 'fish').

F *kala* 'fish'.

E *kala*, Mari *kol*, H *hal*, Tavgi *kállá* 'bid'.

Tam *kōlā* 'flying fish', Tam *kayal* 'carp', Telugu *kalkorē* 'a kind of fish', Malayalam *kāra* 'a fish', *kōlan*, *kōli* 'needle fish' (DED 1314, 1476, 2241).

M *xalimu* 'whal'.

J *karei* 'Steinbutt'.

Q *čālwa* 'fish'.

Note PU *\*kālā* 'fish' (Janhunen 1981), *\*kala* 'fish' (Redei et al 1986).

72. Proto-DURALJAN *\*kaľa* 'drink, beverage'.

F *kalja* 'small beer'.

E *kali*, Komi *kalja* 'small beer'.

Tam *kalī* 'to be intoxicated', Tulu *kalī* 'liquor', Kan *kalya* 'spirituous liquor' (loaned by Sanskrit?), Tam *callu* 'to sprinkle water', (DED 1374, 2384).

Q *čālāy*, 'to sprinkle with liquid'.

Note the methods of making beer.

73. Proto-DURALJAN *\*kali* 'bare, bald'.

F *kalju*, *kali* 'bald, bare', *kaljama* 'ice-coated'.

Lappish *galljem* 'ice-coated'.

Kan *kali*, *kale*, Malayalam *kala* 'scar, mark as of small-pox' (DED 1313).

M *qalžai* 'to grow bald', *xalij-a* 'water appearing over melting ice', Teleutish *kaldjan* 'eine kahle Stelle auf dem Kopfe'.

Q *kalichi* 'pellejo sin lana'.

74. Proto-DURALJAN *\*kalli* 'rock, stone'.

F *kallio* 'rock'.

E *kalju* 'rock'.

Tam *kal*, Kan *kallu*, Kodagu *kallī* 'stone' (DED 1298).

Q *kaľka* 'stone ground'.

75. Proto-DURALJAN *\*kālī* 'sister-in-law'.

F *kāly* 'sister-in-law'.

E *kālī*, Komi *kel* 'sister-in-law', Yurak-Samoyed *sél* 'brother-in-law'.

Telugu *celi* 'female friend', Tam *cilati* 'female companion', *kala* 'unite in friendship, form matrimonial alliance with' (DED 2728).

Turkish *kālī* 'daughter-in-law'.

J *kerai* 'Vasall, Gefolge'.

Q *kallan* 'el uno y el otro'.

Note PU *\*kālīw* 'Schwägerin' (Janhunen 1981).

76. Proto-DURALJAN *\*kama* 'terrible, horrible'.

F *kamala* 'terrible, horrible', *kammo* 'fear, awe, terror'.

E *kamakas* 'chunk', Mari *kamala* 'big and ugly'.

Tam *kamakama* 'to be very fragrant', Kan *kamma* 'bad smell, fragrance (DED 1247).  
Q *kamakay* 'to menace'.

77. Proto-DURALJAN \**kane* 'bell, ringing of bells'.

F *kannel*, kantele 'Finnish musical instrument, zither'.

E *kannel* 'ibid.'.

Tam *kaṇakaṇa*, Kan, Telugu *gaṇagaṇa* 'tingling as of bells', Kan *gaṇal*, *gaṇil* 'ringing of bells' (DED 1162).

M *xanggilza-* 'to resound, to ring'.

J *kane* 'Glocke, Schelle', *kanaderu* 'spielen, musizieren'.

Q *kantela* 'zither' (Anttonen 1977).

78. Proto-DURALJAN \**kaṇku* 'gluteal flesh'.

F *kankku*, *kannikka* 'gluteal flesh'.

H *sonka* 'ham'.

Kan, Telugu *kanda* 'flesh' (DED 1175).

J *hone* 'bone, foot, leg'.

Q *kanka* 'something roasted'.

Note PFU *šāṇkʒ* 'der Hintere, Arsch' (Rédei et al 1988).

79. Proto-DURALJAN \**kawa* 'dry', (B 20, Sw 32 'dry').

F *kapa-* 'dry', *kapakala* 'dried fish', *kuiva* 'dry'.

Tam *kāy* 'to be dried up' (DED 1458).

M *xubaxai* 'dried'.

J *kawaita* 'dry'.

Q *chapiriy* 'secarse algo'.

Note PKJ \**kabák-* 'to dry up' (Martin 1966).

80. Proto-DURALJAN \**kapsa-* 'to squeeze', (Sw 149 'to squeeze').

F *kāpsātä* 'to squeeze' (in Kalevala).

ED *kāpsata* 'to grasp with hand'.

M *xabci-* 'to squeeze'.

Q *qapi-*, *qapču-* 'to squeeze'.

Note F *kāpālā*, E *käpp* 'paw', PFV \**käppä* 'Pfote, Hand' (Rédei et al 1986) and Malto *kape* 'to touch' (DED 1225).

81. Proto-DURALJAN \**kara-* 'to run away'.

F *karata* 'to run away, to escape'.

E *karata* 'ibid.', Mari *kurža.m* 'to run'.

Tam *kara* 'to hide', Kan *kare* 'to run' (DED 1258).

M *xarai* 'to jump', *yar-* 'to go out'.

J *karugaru* 'leicht, mühelos'.

Q *karunchay* 'alejarse', *karunchakuy* 'apartarse'.

Note the group 83.

82. Proto-DURALJAN \**kari* 'man, male', (B 49 'man').

F *karjas* 'ruttish (stallion, bull, man)', *karju* 'boar', FD *karoo* 'ram', *karitsa* 'lambkin'.

Malayalam *karu*, *karu* 'stout, hard', *karuma* 'strength of a man', *karuttan* 'a strong man' (DED 1265).

M *xura-y* 'lamb'.

Q *qari* 'male', *qariča* 'a little boy'.

83. Proto-DURALJAN \**karkoi-* 'to drive away, to expel'.

F *karkoittaa* 'to drive away, to hunt out, to expel'.

E *kargutada* 'to drive away'.

Kan *kaṛipu* 'to cause to go away, or to move', *kaṛi* 'to go very far', Tam *kaṛi* 'to reject, to separate, to abandon', *kaṛical* 'that which is rejected' (DED 1356).

M *yarya-* 'to cause to go, to expel', *xaryui* 'peth, road', *gḥryge(n)* 'hunting, chasing'.

J *kari* 'Hetzejagd, to chase, to hunt', *karidasu* 'herausjagen', *karu* 'treiben'.

Q *qarqu-* 'to drive away', *karkoy* 'desterrar' (Middendorf 1970).

Note the group 81.

84. Proto-DURALJAN \**kar-* 'black, charcoal', (B 8, Sw 14 'black').

F *karsi* 'snuf, soot', *kāry* 'smell, smoke'.

E *kārsata* 'to smell'.

Tam, Malayalam *karu* 'black', *karu* 'to grow black', Telugu *kāru* 'black' (DED 1278).

M *xar-a* 'black, dark'.

J *kuro* 'schwarz'.

Q *karka* 'sucio'.

Note F *karhu*, E *karu* 'bear', Tam *karati* 'Indian black bear' (DED 1263) and Nostratic connections.

85. Proto-DURALJAN \**karu* 'bitter, pungent, smarting sensation'.

F *karvas* 'acid, pungent, bitter'.

Lappish *kārvās*, Komi *kurit* 'ibid.'.

Tam *kār*, *kār*, 'to be acrid, pungent', Malayalam *karukarukka* 'to be harsh, sharp, rough, irritating' (DED 1466, 1492).

J *karami* 'pungent', *karasa*, *karō* 'acid, pungent'.

Q *jarachiy* 'dar dolor de escocimiento', *jaray* 'escocer el cuerpo por los azetos'.

86. Proto-DURALJAN \**kasa* 'heap, multitude'.

F *kasa* 'heap, multitude', *kosolti* 'plentifully'.

Karelian *kaža* 'heap, multitude'.

Tam *kaya*, Telugu, Pengo *gaja* 'large, big' (DED 1093).

J *kasa* 'a heap, pile or bulk', *kazu* 'Zahl, viel, in Menge'.

Q *kosa* 'bien, bueno, rico'.

Note PFU \**kosz* 'reich, freigebig' (Rédei et al 1986).

87. Proto-DURALJAN \**kāte* 'hand', (B 36, Sw 84 'hand').

F *kāsi* (kāte-) 'hand'.

E *kāsi*, H *kéz* 'hand'.

Tam *kai*, Kan *kayi* 'hand, forearm', Kui *kaju*, Kuwi *kēyū* (pl. *keska*) 'hand' (DED 2023),

Tam *katuvu* 'to seize, to grasp' (DED 1200).

M *kōtyl* 'to lead by the hand'.

J *kata* 'Schulter', *kote* 'Vorderarm'.

Q *kučus* 'elbow, ell measure'.

Note the group 93, PFU \**kāte* 'Hand' (Rédei et al 1988) and PKJ \* *k(y)atx(a)* 'side' (Martin 1966).

88. Proto-DURALJAN \**kaska-* 'to bite', (B 7, Sw 13 'to bite').

F *kaskata* 'to bite, to castrate a male reindeer with biting'.

Komi *getškinis* 'to masticate'.

Tam *kaccu*, *kaṭi* 'to bite', Malayalam *kaṭi* 'bite', *kaṭikka* 'to bite' (DED 1097, 1124, 1097).

M *xaza-* 'to bite'.

J *kamu* 'to bite'.

Q *kačuy* 'to bite', *katutiay* 'mascar'.

Note the group 90 and PFP \**kačka* 'beissen' (Rédei et al 1988) and PU \**suski/soski* 'to bite' (Janhunen 1981).

89. Proto-DURALJAN \**kāske-* 'to command'.

F *kāskeä* 'to command'.

E *kāskida* 'to command', Komi *kešjijnj* 'to will'.

Telugu *kasaru* 'to scold' (DED 1089).

M *ge-* 'to say', Kazakh *kisät* 'befehlen'.

J *geji* 'to command'.

Note PFP *\*käske-* 'befehlen, gebieten' (Rédei et al 1988). J *geji* is considered a Sino-Japanese word.

90. Proto-DURALJAN *\*katk-* 'to break, to cut off'.

F *katkaista* 'to break, to cut off'.

E *katkestada* 'to break, to cut off'.

Konda *katki-*, Kui *katk-* 'to cut down with an axe' (DED 1208).

M *xadxu-* 'to pierce, to stab, to prick'.

J *gatatsuku* 'brechlich sein', *hadan*, *hatan* 'Bruch, brechen'.

Q *katka-* 'to bite large chunks out off'.

Note PFP *\*kačka-* 'reissen, zerreißen, entzweigen' (Rédei et al 1988).

91. Proto-DURALJAN *\*katke* 'bitter'.

F *katkera* 'bitter'.

Karelian *kačkera* 'bitter', Mari *kotšo* 'bitter'.

Q *qatqi* 'bitter'.

Note PFP *\*kačkz* 'bitter, sauer, verdorben' (Rédei et al 1988).

92. Proto-DURALJAN *\*katku* 'smoke, stink', (B 75, Sw 142 'smoke').

F *katku*, *kitku* 'heavy smoke'.

E *katk* 'pest', Mordvin *katsamo*, Selkup *kačko* 'smoke'.

Kan *kaccu* 'to sting', *kāṭa*, *gāṭu* 'strong stifling smell'.

J *kusuburu* 'to smoke, to smolder'.

Q *kači* 'salt'.

Note PFV, FP? *\*kačkz* 'Rauch, Geruch, Gestank' (Rédei et al 1988).

93. Proto-DURALJAN *\*katta-* 'to cover'.

F *kattaa* 'to cover', *katto* 'roof, ceiling'.

E *katus* 'roof'.

Tam *kattu*, Kan *kattu* 'to tie, to build', Kan *katana* 'a roof, a thatch' (DED 1147).

M *yadar-* 'to cover', Old Turkish *kat* 'a story of a house, layer'.

J *kodate* 'als Deckung nehmen'.

Q *qata-* 'to cover', *kata*, *qata* 'cover'.

94. Proto-DURALJAN *\*katu* 'a selling place'.

F *katu* 'street'.

Tam *katai* 'shop, bazaar' (DED 1142).

Q *qatu* 'stand, selling place'.

Note that F *katu* has been considered to be a Swedish loan (Toivonen 1974).

95. Proto-DURALJAN \**kecu-* 'to talk (with positive epitets)'.

F *kehua* 'to praise, to boast, to talk about sth or sb with positive epitets, to talk (in some dialects)'.

E *kehelda* 'to boast', H *kegy* 'circus, grace, favor'.

Kan *kōccu* 'to speak much', Tulu *kōca*, *kōcē* 'boasting' (DED 2043).

J *kuchi* a) 'speech, speaking, mouth, jaws'.

Q *quechua*, *quichua*, *kechwa*, *keshua* 'name of the Quechua language'.

About the meaning, note the hypothesis of Anttonen and Hakola (1994), the set F *kehiä* 'twine, wind, ravel', *kōysi* 'rope', Tam *kayiru* 'rope, cord, string' and Q *kechuy* 'torcer hilo, saga'. Note also PFU \**kečā* 'Kreis, Ring, reifen' and PFU \**kewōe* 'Bindfaden, Schnur' (Rédei et al 1988).

96. Proto-DURALJAN \**kecrā-* 'malleolus'.

F *kehrāsluu* 'malleolus'.

J *kurubushi* 'malleolus'.

Note PFV \**kečke-rā* 'rund, krumm' and *kečrā* 'spindel' (Rédei et al 1988).

97. Proto-DURALJAN \**keyta* 'to boil'.

F *keittää* 'to boil', *keitto* 'soup, boiled food'.

E *keeta* 'to boil', Mari *kū.ām* 'to boil' (DED 1458, 2084).

Tam *kāyccu* 'to boil, to cook', *koti* 'to boil'.

J *gutaguta* 'gut durchgekocht'.

Q *jauchay* 'cocer hierbas'.

Note PFU, U? \**keje-* 'kochen, gekocht werden' (Rédei et al 1986) and PKJ \**ko-* 'to distil' (Martin 1966).

98. Proto-DURALJAN \**kek-* 'firebrand'.

F *kekāle* 'firebrand, brand, the embers', *keksi* 'fire hook', *keksiä* 'to invent, to detect, to devise'.

Karelian *kegāleh* 'firebrand'.

M *køgzi-* 'to begin to flame, to blaze up, to rise'.

J *kogasu* 'anbrennen, verbrennen', *kogeru* 'anbrennen, verkohlen, verbrennen'.

Note the groups 97 and 159 as well as G *koks*.

99. Proto-DURALJAN \**keli* 'air, wind, weather', (Sw 191 'wind').

F *keli* 'air, wind, state of the road or trail of skis'.

Karelian *kèli* 'ibid.'.

Tam *kāl*, Kan *gālī*, *gāl*, Telugu *gālī* 'air, wind' (DED 1481, 1499).

M *kei* 'air, wind'.

100. Proto-DURALJAN \**kelo-* 'to strip the outer layer'.

F *kelota* 'to strip the outermost layer', *kelo* 'dried-up-tree'.

Karelian *keloi* 'ibid.', Yurak-Samoyed *sealà*, *sèlà* 'to clean, to clean out'.

M *xoltusu(n)* 'bark of a tree', *xoltusi-* 'to peel off'.

Q *qĩlpa-* 'to stripe plant of fibers'.

101. Proto-DURALJAN \**kelpu* 'powerfull, capable'.

F *kelpo* 'able, capable', *kelvata* 'to be fit, to be suitable'.

E *kõlblik* 'suitable, fit'.

Malayalam *kelpu* 'strength, power', *kelpar* 'the mighty', Tam *kil* 'to be able, *kerpu* 'strength, pover, ability' (DED 1570).

Q *jellpu* 'dichoso, feliz', *kallpa* 'fuerza, poder'.

102. Proto-DURALJAN \**kelte* 'yellow' (B 100, Sw 200 'yellow').

F *keltainen* 'yellow'.

E *kolt* 'yellow'.

M *gilte* 'lustre, shine'.

J *kiro* 'yellow'.

Q *qĩũ*, 'yellow', *jellu* 'amarillo'.

Note the pair F *kelmeä* 'pale', Q *jelly* 'pálido' and Nostratic connections.

103. Proto-DURALJAN \**ken* 'who', (B 97, Sw 188 'who').

F *ken* 'who'.

E *kes* 'who'.

M *ken* 'who'.

Note PFU, U? \**ke* (*ki*) 'wer' (Rédei et al 1986).

104. Proto-DURALJAN \**keri-* a) 'to wind into the ball'.

F *keriä* 'to wind (into the ball), *kerä* 'ball'.

E *kerä* 'ball', Mordvin *kire* 'ball of yarn', Hanti *kəɾə* 'string of furs'.

Tam *curulai* 'to roll up, to curl', *cuṛal* 'to whirl' (DED 2684, 2698).

M *kery-* 'to attach, to tie, to bind', *kerydesyle* 'to wind into the ball'.

J *kuru* a) 'to wind into the ball'.

Q *kurura*- 'to wind up (into the ball), *keruy* 'fajar'.

Note PFU \**kerä* 'Bundel, rund, drehen' (Rédei et al 1986), PKJ \**cur(u)* 'string' (Martin 1966).

105. Proto-DURALJAN \**keri*- b) 'to cut the bark, to carve, to shear'.

F *keritā* 'to cut, to slip, to shear', *keri* 'bark that grows on a birch after the first bark has removed'.

EO *kere* 'bast', Mordvin *kerj*, Mari *kūr* 'linden bark', H *kér* 'membrane'.

Tam *kurai*, Kan *kere* 'to shave, to scrape', Kan *kōre* 'to cut, to carve, to slice' (DED 1859, 964, 2164).

M *kerci*- 'to cut, to mince, to carve, to slice'.

Q *quru* 'clipped, with the ends cut off', *koroy* 'estropear, mutilar, despedazar' (Middendorf 1970).

Note PFU \**kere* 'Rinde' (Rédei et al 1986).

106. Proto-DURALJAN \**ker*- 'to repeat, to tell'.

F *kertoa* 'to tell, to narrate', *kerrata* 'to repeat', *kerta* 'time, turn', *kerros* 'layer, stratum'.

E *kord* 'time', *kordus* 'repetition, refrain', H *kérd*, *keres* 'to ask'.

Kui *kēronđi*, Gabda *keral* 'story, tale' (DED 2006), Tam *kari* 'witness' (DED 1276).

M *gere* 'Zeuge'.

J *kuri-goto* 'Klage, Klagerei, repeating the same story'.

Note Anttonen and Hakola (1994), the pairs F *käräjät*, M *geregyr* 'court', F *käräjöidä*, M *keregyr* 'to quarrel, to dispute', and PFV \**kerta* 'Reihe, Schicht, Mal' (Rédei et al 1986).

107. Proto-DURALJAN \**kettu* 'fox'.

F *kettu* 'fox'.

Tulu *kudige* 'jackal' (DED 1851).

J *kitsune* 'fox'.

108. Proto-DURALJAN \**kele* 'tongue, language', (B 87, Sw 172 'tongue').

F *kieli* 'tongue, language'.

E *keel* 'ibid', Mordvin *kel* 'tongue, speech', Mansi *kelä*, Hanti *köl* 'word, speech'.

Tam *kilavu* 'word, language', Gondi *kel* 'to tell', Kan *kele* 'to vociferate' (DED 2017b).

M *kele(n)* 'tongue, language, speech', *kele*- 'to utter words'.

J *kotoba* 'Zunge, Wort, Sprache'.

Q *qaīu* 'tongue', *jallu* 'lengua, idioma'.

Note PU \**kāxli* 'Zunge' (Janhunen 1981) and \**kele/kēle* 'Zunge, Sprache' (Rédei et al 1986').

109. Proto-DURALJAN \**kīre* 'top of a fjeld', (B 53, Sw 98 'mountain').

F *kiire* 'top of a fjeld'.

E *kiire, kiird* 'crown, top of a head'.

Tam *kuru* 'hill', *kō* 'mountain', Kui *sōru*, Kuwi *hōru* 'hill, mountain' (DED 2887).

M *kir-a* 'summit'.

110. Proto-DURALJAN \**kīř-* 'to praise'.

F *kiittää, kiitellä* 'to thank, to praise'.

E *kiita* 'to thank, to praise'.

M *gedeg-, getel-* 'to say'.

J *kito* 'Gebet, Tischgebet'.

111. Proto-DURALJAN \**kila-* 'to shine, to be shining', (B 52 'moon').

F *kilottaa, kiilua, kiittää* 'to shine, to be shining'.

E *kiilata* 'to shine'.

Tam *kiḷar* 'to shine', Malayalam *kiḷar* 'splendour' (Ded 1583).

M *gilai-* 'to shine'.

J *giragira, kirakira* 'glizern, funkeln, glänzend, leuchtend'.

Q *kiḷa* 'moon, the shine (of moon), *killay* 'brillar la luna, las estrellas'.

Note PU \**kunĵ / kĵĵ* 'moon' (Janhunen 1981).

112. Proto-DURALJAN \**kina-* 'to quarrel, to dispute'.

F *kina* 'quarrel, dispute', *kinata* 'to quarrel, to dispute'.

E *kōne* 'speech, talk', *kōnekas* 'talkative'.

Malayalam *kiṇayuka* 'to quarrel', Kan *keṇaku* 'to irritate, to provoke', *kinisu* 'to be angry' (DED 1944, 1600).

M *kina-* 'to examine carefully', *kinu-* 'sich grämen'.

J *kenasu* 'schlecht reden, nörgeln'.

Q *jenjuchiy* 'torcer en centido des las palabras'.

Note A *gainsay*, the note of Anttonen and Hakola (1994), and PFU \**kiñä* (*kürñä*), ? *kinä* (*künä*) 'Ellenbogen' (Rédei et al 1986).

113. Proto-DURALJAN \**kirikiri-* 'to gnash'.

F *kiristellä* 'to gnash'.

E *kiristada* 'to gnash'.

Tam *karakara*, Kan *gara*, Malayalam *karakarē* 'to crackle in the mouth, imitation of gnashing'.

J *girigiri* 'to gnash'.

Q *kiričičiči-* 'to gnash'.

Note the groups 115 and 116 and Kan *kār* 'to bite'.

114. Proto-DURALJAN \**kiru-* a) 'to write'.

F *kirjottaa*, FD *kiruttoa* 'to write', *kirja* 'book, mark, cut'.

E *kirjata* 'to write', *kiri* 'letter, ornamente'.

Tam *kīru* 'to write, to drawn lines', Kan *kiraka* 'a scribe, a scratcher, *gīru* 'mark, sign' (DED 1623).

M *ziru-* 'to drawn'.

Q *qilqay* 'to write, to drawn'.

Note the group 116. The separate development is possible.

115. Proto-DURALJAN \**kiru* b) 'tooth', (B 88, Sw 173 'tooth').

F *kirota* 'to curse, to damn', *kirokala* 'ruff', *kirves* 'ax, axe'.

E *kirves* 'ibid.', *kirutada* 'to curse, to damn'.

Malayalam *ekiru*, *akiru* 'tooth', *kāruka* 'to gnaw', Kan *kār* 'to bite' (DED 554, 1474).

M *kiris* 'unicorn'.

J *kiri* 'bore'.

Q *kiru* 'tooth'.

Note the groups 114 and 116 and the hypothesis of Hakola 1989. F *kirves* is considered to be a Baltic loan.

116. Proto-DURALJAN \**kiru* c) 'to separate'.

F *kirvoittaa* 'to separate'.

Tam *kīru* 'to cut, to slit, to slip', Gondi *kīr* 'a wound' (DED 1624).

M *kiru-* 'to cut into small pieces'.

J *kiru* 'to cut'.

Q *kiri-* 'to wound'.

Note the group 115, PFP \**kirā* 'hauen, schlagen' (Rédei et al 1988) and PKJ \**kyor-* 'to cut' (Martin 1966).

117. Proto-DURALJAN \**kita* 'mouth, the lips', (B 54, Sw 99 'mouth').

F *kita* 'jaws, open mouth'.

E *kida*, *kidu* 'open mouth'.

Kui *guti* 'mouth' (DED 1700).

Q *qita*, *hita* 'lip', *jita* 'labios'.

Note J *kuchi* 'mouth' in the group 95 and PKJ *\*kutyi* 'mouth' (Martin 1966).

118. Proto-DURALJAN *\*kica* 'stingy, precise, tight', (Sw 101 'narrow').

F *kitsas* 'stingy, precise, tight'.

M *kizayarla-* 'to be restricted or limited'.

J *kitchiri* 'precise, exact'.

Q *kički* 'tight, narrow, full'.

Note PFV *\*kića* 'heftig, hitzig' (Rédei et al 1986).

119. Proto-DURALJAN *\*kowi* 'birch'.

F *koivu* 'birch'.

E *kōiv*, Karelian *koivu* 'birch', Mari *ku.yi*, *kue*, Yurak-Samoyed *kō* 'birch'.

M *kusun*, *xusu(n)*, Tungusic *kivō* 'birch'.

J *kaba* 'Birke'.

Note PU *koxji* 'Birke' (Janhunen 1981).

120. Proto-DURALJAN *\*koya* 'hut, stall'.

F *koju*, *koija* 'hut, stall'.

E *koi* 'couch, bed'.

J *koya* 'hut, stall'.

121. Proto-DURALJAN *\*kok-* 'to joke'.

F *kokka(puhe)* 'joke, joking'.

Komi *kok* 'Hacken'.

Telugu *kokkarincu* 'to mock, to ridicule', Tam *kokkari* 'to shout in triumph' (DED 2031).

M *gokir* 'Schwätzer, Lügner'.

J *kokkei* 'Scherz, Witz'.

Q *chaukay* 'burlarse'.

122. Proto-DURALJAN *\*koli* 'a metal, silver?'.

F *kolikko* 'coin', *kolja* 'chain of gold or silver'.

Livonian *kol* 'ferrule'.

Tam *kolucu* 'gold or silver chain', Telugu *golusu*, Kolami *golsā* 'chain', Tam, Malayalam,

Kan *kūli* 'wages, hire' (DED 2134, 1905).

M *kølysyle-* 'to hire', *kølysyci* 'laborer'.

Q *quī* 'silver, money, coins', *jollje* 'plata, dinero, moneda'.

Note F *kulta*, Lappish *gulle* 'gold' and the Nostratic connection.

123. Proto-DURALJAN \**kol-* 'three' (Sw 169 'three').

F *kolme* 'three'.

E *kolm*, Komi *kvim*, H *harom* 'three'.

M *yurban* 'three'.

Q *kimaq*, *kimsa* 'three'.

Note PFU \**kolme* 'three' (Rédei et al 1986) and PQ \**kimsa* 'three' (Parker 1969).

124. Proto-DURALJAN \**kopu a* 'basket, knot'.

F *koppa* 'basket'.

ED *kopp* 'cup', Mansi *kâp* 'cup'.

Turkish *kab* 'Gefäss, Topf'.

J *kobu* 'knob, knot'.

Note PFU \**koppa* 'etwas Gehöltes' (Rédei et al 1986) and Nostratic connections.

125. Proto-DURALJAN \**kopu b* 'hand' (B 36, Sw 66 'hand').

F *kopra*, *koura* 'fist, hand', *kopara* 'hof of reindeer'.

Karelian *kobra* 'fist', Komi *kabir*, Hanti *kùwr* 'fist'.

M *xobuyur* 'concave'.

J *kobushi* 'fist'.

Q *kapo* 'palma'.

Note F *kovera*, J *kuboi* 'concave, the groups 64, 80 and 125, and PFU \**kopra* 'Faust, ein Handvoll' (Rédei et al 1986).

126. Proto-DURALJAN \**kopu c* 'ferry, raft'.

F *kopukka* 'primitive raft'.

Tam, Malayalam *kappal* 'ship', Toda *kopol* 'boat' (DED 1219).

J *kobune* 'ship'.

Note also F *haapa* 'aspen', *haapio* 'boat, originally gouged out of a aspen trunk', Mari *sa.pi* 'aspen', M *zabi* 'small boat' and Korean *cabi* 'a ferry'.

127. Proto-DURALJAN \**koru* 'a metal, gold?'.

F *koru* 'ornament, trinklet', *korento* 'pole, bar', *kuras* 'knife'.

Karelian *korie* 'beautiful', E *kurask* 'knife', Yenisei-Samoyed *koru*, *kolu* 'knife'.

Tam *ko.ru*, Tulu *koru* 'bar of metal', Konda *kūrām*, Kui *kūrē* 'knife', Malayalam *kuṛa* 'ear-ring, Kolami, Gondi *kuro* 'silver', Tam *kōram* 'metallic dish or plate', *kārai*, Malayalam *kāra* 'collar of gold or silver' (DED 2147, 1913, 1823, 2228, 1506).

M *kyrel* 'bronze', *gyry* 'iron stone', *kyr* 'reddish clay used in smelting copper'.

Q *quri*, 'gold', *jori* 'oro'.

Note the land name Korea, PU *\*kurā-* 'Messer' (Janhunen 1981) and *\*kurə* 'Messer' (Redei et al 1986).

128. Proto-DURALJAN *\*korwa* 'ear', (B 21, Sw 35 'ear').

F *korva* 'ear'.

E *kōrv* 'ear', Komi *kor* 'leaf'.

Tam *kurai* 'ear' (DED 1823).

M *xulki* 'earwax, middle ear', Turkish *kulak*, *kulka* 'ear'.

Note PU *\*kāwǝ* 'Ohr' (Janhunen 1981), PFU *korə* 'Blatt' (Rédei et al 1986).

129. Proto-DURALJAN *\*kos-/kas-* 'wet' (B 94, Sw 183 'wet').

F *koste* 'wet', *kaste* 'dew', *kostua*, *kastua* 'to get wet'.

E *kostuda* 'to smelt'.

Tam *kaci* 'to ooze out, to perspire', Kan *kasi* 'to ooze, fine rain' (DED 1091).

J *kosame* 'Spühregen, der feine Regen', *kosui* 'Landsee', *kasen* 'Gewässer'.

130. Proto-DURALJAN *\*kota* 'teepee'.

F *kota* 'teepee', *koti* 'home'.

E *kodu* 'home'.

Tam, Malayalam *kuṭi* 'house, home', Kan *guḍi* 'house', Gondi *kota* 'cowshed' (DED 1645).

M *kḥte* 'retinue, tent', *xota(n)* 'city, town'.

J *ko*, *katei*, *kataku* 'house'.

Note PFU *\*kota* 'Zelt, Hütte, Haus' (Redei et al 1986).

131. Proto-DURALJAN *\*kowa* 'hard'.

F *kova* 'hard'.

E *kōva* 'hard, firm, solid'.

J *kowai* 'hart, stark, zäh'.

132. Proto-DURALJAN *\*kul-* 'to go', (B 32 'to go').

F *kulkea* 'to go, to walk, to trawel, to wander'.

E *kulgeda* 'ibid.', H *kel* 'to go', Yurak-Samoyed *hùlàgu* 'to go with the current'.

Tam *kulavu* 'to walk', Malayalam *celka* 'to pass, to pass through etc.', Pengo *hal-* 'to go' (DED 1803).

M *yulyu-* 'to glide, to slide', Turkish *gelmek* 'to come'.

J *kuru* b) 'to come'.

Q *chullai* 'apartarse'.

Note PU *\*kulke-* 'sich bewegen, gehen' (Rédei et al 1986) and PKJ *\*kal-/kat-/kaš-* 'to walk' (Martin 1966).

133. Proto-DURALJAN *\*kuma-* 'to bow down'.

F *kumara* 'bowed', *kumartua* 'to bow down'.

E *kummardada* 'ibid.', Mordvin *koma-* 'to bent down', Hanti *komtah* 'upside down', Selkup *qamd* 'face downward'.

Malayalam *kumpiṭuka*, *kummiṭuka* 'to bow down', Tam *kamur* 'to be upside down', *kumpam* 'upper part of the back between the shoulders' (DED 1750).

M *kømyri-* 'to upset'.

J *kubomi* 'Grube, Höhle'.

Q *kumu-*, 'to bend down', *kumu* 'hunchback', *kumpa* 'thrown to the ground'.

Note the groups 134 and 135 and PU *\*kumâ* 'umwerfen, umgeworfen sein' (Janhunen 1981), PU *\*kuma* 'gebeugte, umgestürzte Lage' (Rédei et al 1986).

134. Proto-DURALJAN *\*kumma* 'odd, strange'.

F *kumma*, *kummallinen* 'odd, strange', *kummitus* 'ghost'.

E *kummaline* 'odd, strange'.

Kan *gumma* 'devil, bugbear' (DED 1758).

J *gumai* 'idiot', *gu* 'Dummheit'.

Q *kumuysan* 'a person or animal not wholly aware of his surroundings due to timidity or sickness'.

Note the group 133.

135. Proto-DURALJAN *\*kumo* 'cloud', (B 14, Sw 21 'cloud').

F *kumuri* 'a little cloud', *kumu* 'thundering voice', *kumo* 'arch of heaven'.

E *kume* 'thundering voice', Komi *kimer* 'cloud'.

Golde *humsuri* 'cloud'.

J *kumo* 'cloud', *kumoi* 'sky, horizon'.

Q *kumyay*, *kumniy* 'tronar'.

Note PFU *\*kume* 'Wolke' (Rédei et al 1986) and PKJ *\*kulmo* 'cloud' (Martin 1966).

136. Proto-DURALJAN *\*-kun-* 'suffix for explicit plural, army'.

F *-kunta* 'prigade, army, group of men, suffix for explicit plural', *kunta* 'municipality'.

E *kond* 'ibid.', Mansi *hânt* 'army, host'.

Kan *kundu* 'heap, mass, crowd', Kan *gumi*, Telugu *gumi* 'crowd, multitude' (DED 1741).

M *kymys* 'nation, people, population'.

J *gun* 'group, crowd, army, Landkreis', *kumi* 'Klasse, Gruppe, Partei', *kuni* 'country, realm, province'.

Q *-kuna* 'suffix for explicit plural'.

Note PFU (U?) *\*kunta* 'Geschlecht, Sippe, Gemeinschaft' (Rédei et al 1986) and PKJ *\*kunyi* 'place' (Martin 1966). Note also Chinese *gyn* 'army'.

137. Proto-DURALJAN *\*kuntu* 'ability, strength'.

F *kunto* 'ability, capability, condition, trim', *kunnia* 'honor'.

Lappish *gunde* 'brave', Udmurt *kužim* 'power'.

Kan *gaṇḍu* 'strength, manliness, largeness, firmness, bravery, male sex, man', Tam *kaṇṭaṇ* 'warrior, husband', Kolami *Gonḍa* 'man of Gond tribe' (DED 1173, 2072).

M *kyndy* 'heavy, weighty', *kyndylel* 'honor', Turkish *kunt* 'stark, kräftig, breit und stumpf'.

Note the group 137 and PFU *\*kunč3/kuč3* 'Kraft, Stärke' (Rédei et al 1986).

138. Proto-DURALJAN *\*kol-* 'to die', (B 17, Sw 27 'to die').

F *kuolla* 'to die'.

E *kool*, H *hal*, Yenisei-Samoyed *kāro*, *kādo* 'to die'.

Tam *kol* 'to kill', *kōl* 'killing', Kan *kol*, *kolu*, *kollu* 'to kill' (DED 2132, 2152).

M *xoru-* 'to die'.

J *korosu* 'töten, morden'.

Q *kolluy*, *jolluy* 'acabar, exterminar' (Middendorf 1970).

Note PU *\*kå(x)(l)e* 'to die' (Janhunen 1981) and PU *\*kola-* 'sterben' (Redei et al 1986).

139. Proto-DURALJAN *\*kora* 'bark, shell', (B 3, Sw 8 'bark').

F *kuori* 'shell, bark, husk, cortex', *kaarna* 'bark'.

E *koor* 'shell, bark, husk, cortex', *kaarn* 'crust, scab', Mansi *gor* 'bark, peel', Selkup *kyra-* 'peel, skin'.

J *kōra*, *kara* 'shell, bark, husk, cortex, shield'.

Q *qara* 'shell, bark, husk, cortex, skin'.

Note the set F *kurittaa*, E *karistada*, J *korasu* 'to punish', Q *jarachay* 'dar dolor'. Note also PFU *\*kore/kōre* 'Schale, Rinde', PU\* *kora-(kura)-* 'schinden, abschälen' (Rédei et al 1986) and PKJ *\*kwor(?x)(a)-* 'empty' (Martin 1966).

140. Proto-DURALJAN *\*kura* 'mud, mire, muck'.

F *kura* 'mud, mire, muck'.

E *kura* 'mud, mire, soil'.

Tam *kuṛai* 'soft mud, mire', Malayalam *kurañṇi* 'mire, mud, fine clay' (DED 1822, 2123).

Q *kurpa* 'mud ball, lump of earth'.

141. Proto-DURALJAN \**kusi* 'urine'.

F *kusi* 'urine'.

E *kusi*, H *húgy*, Selkup *kūz* 'urine'.

Konda *kus-* 'to urinate' (DED 1635).

M *kyci* 'sour, acidity'.

J *kuso* 'Kot, Auswurf', *kusai* 'übelriechend, stinkend, faul, verdorben'.

Note PU \**kuřsĵ* 'Harn' (Janhunen 1981), PU \**kuřċe/kuće* 'Harn, hamen' (Rédei et al 1986), and PKJ \**kusya-* 'stinking' (Martin 1966).

142. Proto-DURALJAN \**kuti/kitu* 'smallness, dwarfishness', (Sw 134 'short').

F *kutistaa* 'to cause to shrink', *kitu(kasvuinen)* 'stunted'.

E *kidur* 'poorly, stunted, sickly, ailing', Komi *kiž* 'stillborn baby'.

Tam *kuttam* 'smallness', Malayalam *kuṭu* 'small', Kan *kūcu*, *guccu*, *guju* 'smallness, dwarfishness', *kuttu-* 'that is small', Tulu *kuddya* 'short, small', Koraga *kudde* 'dwarf' (DED 1670, 1851).

Q *kutu* 'cortado'.

Note PFU \**kiče* 'Krankheit' (Rédei et al 1986).

143. Proto-DURALJAN \**kutka* 'tickling, itch'.

F *kutka* 'tickling, itch', *kutittaa* 'to tickle'.

E *kūdi*, *kōdi* 'tickling, itch'.

Kan *kajji* 'scab, itch' (DED 1104).

J *kusuguru* 'kitzeln'.

Q *qatqa-* 'to scratch, to scrape'.

144. Proto-DURALJAN \**kuto-* 'to weave'.

F *kutoa* 'to weave, to knit'.

E *kududa*, Mordvin *kodams* 'to weave, to knit'.

Tam *kattu*, Kan *kattu*, Telugu *kattu* 'to tie, to bind', Tam *katir*, Kan *kadir*, Telugu *kadaru* 'spinner's spindle' (DED 1147, 1195).

J *hata* 'Webstuhl, weben, wirken'.

Q *jotoy a)* 'hacer nudos'.

Note the sets F *kutea*, E *kudeda* 'to spaw', Tam *kūtu* 'to come together, to assemble, to associate', Kan, Telugu *kūḍu* 'to join, to have sexual intercourse' (DED 1882), Q *jotokay* 'reunirse gente', as well as F *koota*, E *koguda* 'to gather, to assemble' and Q *jotoy b)* 'amontonar'. Note also PFP \**kuḍa-* 'weben, flechten' and PU \**kuḍe* 'laichen' (Rédei et al 1986).

145. Proto-DURALJAN \**kuc-* 'to call, to convoke'.

F *kutsua* 'to call, summon, invite etc.'.

Lappish *goččot* 'to call, to order', Hanti *xutta* 'to allure'.

Tam *kūt̪tu* 'to convoke' (DED 1882).

J *kuchi* b) 'to call'.

Q *jotokay* 'reunirse gente'.

146. Proto-DURALJAN \**kūl-* 'to hear', (B 38, Sw 69 'to hear').

F *kuulla* 'to hear'.

E *kuulda*, Mari *kola.m*, H *hall* 'to hear'.

Kan *kēl*, *kēlu* 'to hear' (DED 2017).

J *kiku*, *kikoeru* 'hören'.

Turkish *kulkuk* 'to hear'.

Note PFU, PU? \**kule-* 'hören, Ohr' (Rédei et al 1986).

147. Proto-DURALJAN \**kūma* 'hot', (B 91, Sw 179 'warm').

F *kuuma* 'hot', *kuume* 'fever'.

E *kuūm* 'hot', Mordvin *kumoka* 'fever'.

Tam *kumai* 'to be hot, sultry', Malayalam *kumural* 'oppressive heat' (DED 1752).

Q *quñi* 'warm, heated'.

Note PFV \* *kūma* 'heiss, glühend, Fieber' (Rédei et al 1986), and J *goma* 'das heilige, zur anrufung Buddhas dienende Feuer'.

148. Proto-DURALJAN \**kūra* 'rime, white frost'.

F *kuura*, *huurre*, *härmä* 'rime, white frost'.

Lappish *kårrä*, Komi *gjer*, Selkup *kuro* 'frost'.

Kolami *kor*, *korv* 'coldness', Kan *kore*, *korī* 'to pierce as cold', Gonda *kharrā* 'frost' (DED 2168).

M *kiraya* 'hoarfrost'.

J *kōri* 'Eis', *kōru*, 'gefrieren'.

Q *chiri* 'frio'.

Note the group 69 and PU \**kura* 'Reif, feiner Schnee' (Rédei et al 1986).

149. Proto-DURALJAN \**kūro* 'shower of rain'.

F *kuuro* 'shower of rain'.

M *xur-a* 'rain'.

Q *chirma* 'aguacero'.

Note the pair J *kuro* 'Rain', Q *qura* 'grass, green'.

150. Proto-DURALJAN \**kūse* 'spruce'.

F *kuusi* 'spruce'.

E *kuusk*, Mordvin *kuz*, Mari *koz*, Tavgi *kat* 'spruce'.

M *xusi* 'cedar, Siberian pine'.

J *kusu* 'camphor tree', *kozue* 'Baumwipfel, -spitze'.

Note PU \**kāxsi* 'Fichte' (Janhunen 1981), PU \**kuse/kose* 'Fichte, Tanne' (Rédei et al 1986).

151. Proto-DURALJAN \**kuwe* 'waist, side'.

F *kuve* 'waist, side'.

E *kube* 'ibid., groin'.

Tam *kavar* 'to branch off', Kan *kaval* 'bifurcation, couple, pair', Malayalam *kava* 'space between the legs' (DED 1325).

J *kawa* 'Seite'.

Note F *kaveri* 'chap, fellow', Telugu *kava* 'pair, couple' and PKJ \**kapa* 'near (side)' (Martin 1966).

152. Proto-DURALJAN \**külä* 'village'.

F *kylä* 'village'.

E *kūla* 'village', H *góré* 'watch-tower'.

Tam *kēl* 'kindred, friendship, friend' *kīlai* 'kindred', *cēri*, Malayalam *cēri* 'village, street', Kan *kēla* 'companion, relations' (DED 2018, 2007).

M *kyi* 'family, klan, kinsfolk', Volga Turkish *kül*, *kil* 'Hof, Gasthof', Yakut *külä* 'entrance hall, vestibule'.

J -*gara*, -*kōri* 'the subdivision of a kuni', *kura* 'Speicher, Magazin, Lager'.

Q *kailla*, *jailla* 'arrabal, postreras casas de pueblo'.

Note PFU \**kilā* (*külä*) 'Wohnung' (Rédei et al 1986).

153. Proto-DURALJAN \**kül* 'well enough'.

F *kyllin* 'well enough', *kyllä* 'yes, enough, indeed', *kylläinen* 'satisfied'.

E *küll* 'yes, enough, indeed'.

Kan *kōl*, *kül* 'length, largeness', Telugu *kōlu* 'big, huge, much, very' (DED 2239).

Q *kailla* 'esto no mas', *kailalla* 'todos', *kaillamanta* 'todo'.

Note PKJ \**cal* 'to suffice' (Martin 1966) and J *tariru* 'genügen'.

154. Proto-DURALJAN \**kūlmä* 'cold' (B 15, Sw 22 'cold').

F *kylmä* 'cold'.

E *kūlm*, Mordvin *kel'mä* 'cold'.

Tam *kulutti*, *coli* 'cold', *kulir*, Kan *kulir* 'coldness', Telugu *gōlincu* 'to fry', Kuwi *salma* 'cool' (DED 1834, 2246).

M *kϕlmy-* 'to freeze over', *kϕldy-* 'to freeze'.

J *shimo* 'Frost'.

Q *čulī* 'cold, catarrh'.

Note PFP *\*kilmä(kūlmā)* 'kalt, Kälte, kalt werden' (Rédei et al 1986) and PKJ *\*syilmö* 'frost' (Martin 1966).

155. Proto-DURALJAN *\*kūlp-* 'to wash, to bath'.

F *kylpeä* 'to wash, to bath', *kylpy* 'bathing'.

Livonian *kūlbē* 'to bath in the see'.

Tam *kuli* 'to bath, to wash', *kulippu* 'bathing, washing' (DED 1832).

Q *jala* 'desnudo, pelado, limpio, blanco, claro'.

Note F *kalpea*, *kalvakka* 'pale', *kelteisillään* 'naked, nude', and about the meaning the pair Malayalam *ayavu* 'washing', Q *aywi-* 'to wash'.

156. Proto-DURALJAN *\*kūnā* 'pen'.

F *kynä* 'pen, pencil, squill', *kyniä* 'to pick, to plock'.

Karelian *kūnā* 'squill'.

Tam *koṇai* 'tip, end (as of needle)', *kuṇai* 'sharp point or tip of a thing', Telugu *kona* 'end, point, tip, summit' (2174).

Q *kantu* 'end, tip, edge' (Spanish loan?).

Note PFP *\*kinā(kūnā)* 'rinnen, röhrenförmiges Gefäss' (Rédei et al 1986).

157. Proto-DURALJAN *\*kūnsi* 'nail, claw', (B 13 'claw').

F *kynsi* 'nail, claw', *kyntää* 'to plow, to plough'.

E *kūūs* (gen. *kūüne*), Mansi *kūns*, Yurak-Samoyed *hada* 'nail', E *kūnda* 'to plow, to plough'.

J *kugi* 'nail'.

Note PFU,U? *\*kinče/künče* 'Nagel, Klaue' (Rédei et al 1986).

158. Proto-DURALJAN *\*kūpā-* 'helmet'.

F *kypärä* 'helmet'.

E *kūpar* 'cap'.

J *kabuto* 'helmet'.

159. Proto-DURALJAN *\*kūtā* 'to burn without flame', (B 27, Sw 48 'fire').

F *kytö* 'burned-over marsh', *kyteä* 'to smolder, to be smoldering'.

E *kūtta* 'to burn marsh', Mansi *kūs* 'to burn without flame'.

Tam *kiccu*, Kan *kiccu*, Telugu *ciccu* 'fire' (DED 1514).

J *kītsuen* 'das Rauchen'.

Note PFU *\*kiče-(kūče-)*, 'glühen, ohne Flamme brennen' (Rédei et al 1986) and the group 92.

160. Proto-DURALJAN *\*kūḏʒ* 'brother-in-law'.

F *kyty* 'wife's brother-in-law'.

E *kūdi*, Mansi *kil* 'brother-in-law'.

Telugu *kōḍe* 'male, youthful' (DED 2199).

M *kydeqy* 'son-in-law', Old Turkish *kūde* 'quest'.

J *kata* 'Seite, Partei'.

Q *kata* 'yemo'.

Note PFU *\*kiḏʒ/kūḏʒ* 'Schwanger' (Rédei et al 1986).

161. Proto-DURALJAN *\*küye* 'viper', (B 76, Sw 144 'snake').

F *kyy* 'viper, adder'.

E *kūū*, H *kígyó*, Selkup *šū*, *syy* 'snake'.

Q *katari* 'vibora'.

Note PU *\*kije/kūje* 'Schlange' (Rédei et al 1986).

162. Proto-DURALJAN *\*kūnū* 'a squinteye'.

F *kyyny-*, *kyynāsilma* 'one with peering eyes'.

Mordvin *konams* 'to close eyes', H *húny* 'to close eyes'.

Kan *kōṅgaṇṇu* 'a squinteye' (DED 2209).

Note PU *\*kuńá* 'die Augen Schliessen' (Janhunen 1981) and PU *\*kuna* 'ibid.' (Rédei et al 1986).

163. Proto-DURALJAN *\*kūnā* 'ell, ell measure'.

F *kyynārā* 'ell, ell measure'.

E *kūūnar*, Mordvin *keńeń*, *kōnyōk* 'ell'.

Tam *kōṇ* 'crookedness, angle', *kōṇu* 'to be bent, curved' (DED 2209).

J *kuneru* 'to be bent, crooked, sich krümmen'.

Q *qunqura-* 'to kneel'.

Note the group 112 and PFU *\*kinā/kūnā* 'Ellenbogen' (Rédei et al 1986).

164. Proto-DURALJAN *\*küte* 'shirt'.

F *kyyttö* 'a cow with a white stripe on back'.

Votic *tsiutto* 'shirt'.

Tam *kōti* 'newly purchased cloth', Tam *caṭṭai* 'jacket, coat, slough of snake', Malayalam *cattu* 'jacket, armour' (DED 2198, 2310).

M *kyrm-e* 'short jacket'.

Q *katon* 'camisa'.

165. Proto-DURALJAN \**läkte-* 'to go, to depart', (B 32 'to go').

F *lähteä* (*läks-*) 'to go, to depart'.

E *lähtuda* 'to depart', Mari *läktä-* 'to go or come out', Hanti *lüyat-* 'come'.

Tulu *lakkuni* 'depart' (DED 509).

J *yuku* 'gehen, reisen, abfahren'.

Q *Īuqsi-* 'to depart', *Iloqsiy* 'salir, afuera'.

Note PFU \**läkte-* 'weggehen, hinausgehen' (Rédei et al 1986).

166. Proto-DURALJAN \**lexti* 'leaf', (B 44 'leaf').

F *lehti* 'leaf'.

E *leht*, Mari *lēštāš* 'leaf'.

Tam *ilai*, Kolami *rekka* 'leaf', Malayalam *ilakku* 'a single leaflet' (DED 497).

Q *Īaqi* 'leaf'.

Note PFV \**leste* 'Blatt' (Rédei et al 1986).

167. Proto-DURALJAN \**liwpe-* 'to wash, lye', (Sw 180 'to wash').

F *lipeä*, *live* 'lye, caustic alcali', *lipevä*, *liukas* 'slippery', *livettää* 'to be slippery', *liumentaa*, *liuottaa* 'to dissolve'.

E *libe* 'slippery'.

Tam *alampu*, Kan *alambu* 'to wash, to rinse', Malayalam *aliyuka* 'to dissolve' (DED 246, 250).

M *ariy* 'pure, clean'.

J *arai* 'das Waschen'.

Q *Ilumpai* 'limpiar'.

About the additive /a/ in Dravidian note Tam *alaku* 'number' and F *luku* 'number'. A possible variant of cognates are perhaps also F *lampi*, Karelian *lambi*, Yurak-Samoyed *lymbad* 'pond, pool' with its smooth water. Note also Nostratic connections.

168. Proto-DURALJAN \**liu* 'crowd, great number', (B 50, Sw 95 'many').

F *liuta* 'crowd, great number'

Lappish *liwd* 'crowd'.

J *ryō* 'quantity, multitude'.

Q *īiw*, 'everyone, all, whole entire', *liwča* 'all of you/them'.

Note Chinese *liè* 'Reihe, Glied, reihenweise ordnen, Präfix zur Bezeichnung des Zusammenfassens oder des Plurals'.

169. Proto-DURALJAN \**luku* 'number, figure'.

F *luku* 'number, figure', *lukea* 'to read, to count'.

E *luku* 'number', *lugeda* 'to read, to count', Mari *luyam*, Mansi *lowinti* 'ibid'.

Tam *alaku* 'number, calculation' (DED 238).

J *yaku* 'übersetzung', *yakusu* 'übersetzen, übertragen'.

Note PFU,U? \**luke* 'Zahl, Anzahl' (Rédei et al 1986).

170. Proto-DURALJAN \**lū* 'bone', (B 10, Sw 17 'bone').

F *luu* 'bone', *lumpio* 'patella'.

E *luu*, Mari *lu*, Mansi *lu*, Yurak-Samoyed *lī* 'bone'.

Tam *elumpu*, Kan *elu*, *eluvu*, *elubu*, *elvu*, Tulu *elu* 'bone' (DED 839).

Q *tuŭ* 'bone'.

Note PU \**l̥ixj/luxj* 'Knochen' (Janhunen 1981), *luwe* 'Knochen' (Rédei et al 1986).

171. Proto-DURALJAN \**mā* 'earth', (B 99 'world', Sw 36 'earth').

F *maa* 'earth', *maat ja mannut* 'earths and earths', *mantere* 'mainland', *mantu* (pl. *mannut*) 'earth, land, ground'.

E *maa*, Komi *mu*, Mansi *mā*, Tavgi *mou* 'earth'.

Tam *māṇ* 'the earth, world', Kan, Malayalam *man*, *mannu* 'earth' (DED 4666).

J *ma* '(Zwischen)Raum, Abstand, Zimmer, Stube'.

Note PU \**maye* 'Land, Erde' (Rédei et al 1986).

172. Proto-DURALJAN \**māni* 'to imitate, to allure'.

F *maania* 'to hunt by imitating', *maanitella* 'to allure, to prevail'.

Karelian *moanita* 'to allure, to deceive'.

Turkish *manitu* 'Lüge', *manent* 'gleich, ähnlich'.

J *maneru* 'to imitate', *manimani* 'Willenlos folgen', *monomane* 'Imitation, Nachahmung'.

173. Proto-DURALJAN \**maco* 'old, barren, farrow', (Sw 108 'old').

F *maho* 'farrow (cow), barren'.

Karelian *maho* 'ibid.', Mari *muzo* 'evil, spirit, disease', Hanti *moc* 'disease, guilt'.

Tam *mācu* 'spot, defect, fault, sin, evil', Kuwi *māh* 'to become dirty', Malayalam *macci* 'barren woman' (DED 4792, 5102).

M *mayu* 'bad, evil', *mayuda* 'to become weak, to worsen'.

J *mahi* 'Lähmung, Paralyse'.

Q *mawka* 'old, spent, worn out', *machu* 'anciano, viejo', *machuyay* 'envecerer, debilitarse'.

174. Proto-DURALJAN \**maku-* 'to taste, to eat', (B 22, Sw 37 'to eat').

F *maku* 'taste', *maistaa* 'to taste', OF *muikota* 'to eat'

E *magu* 'taste'.

Tam *mukku* 'to eat in large mouthfuls', *micai* 'to eat, to taste', Kan *mukku* 'to eat' (DED 4897, 4842).

J *mikaku* 'Geschmack'.

Q *miku-* 'to eat'.

175. pDURALAJN \**malki* 'pole', (B 89, Sw 174 'tree').

F *malko*, *malkio* 'ridgepole'.

E *malk* 'pole'.

Tam *maram* 'tree, wood' (DED 4711).

J *maruki* 'der unbehauene Baustamm'.

Q *mãlki* 'sapling'.

Note a high-grade similarity both in sound and meaning!

176. Proto-DURALJAN \**mallas* 'malt'.

F *mallas* (gen. *maltaan*) 'malt'.

ED *mallad* 'malt'.

Kolami *māl* 'beans', Tam *māli* 'toddy', *māl* 'to be confused', Naiki of Chanda *māl* 'liquor' (DED 4828, 4822).

J *moyashi* 'Malz, die gekeimten Bohnen'.

Q *malta* 'cántaro de chicha', *mãlaw* 'a medicinal herb'.

F *mallas* is considered to be a German loan. Note Sanskrit *mālīka* 'an intoxicating drink'.

177. Proto-DURALJAN \**malli* 'model, pattern'.

F *malli* 'model, pattern, shape, form'.

Karelian *malli* 'ibid.', ED *mall* 'model, scheme'.

Tam *mālai* 'garland, wreath, necklage', Kan *māle* 'ibid, row, line, series' (DED 4827).

J *moyō* 'Muster'.

Q *mãlī-* 'to try, to try out, to test, to taste'.

178. Proto-DURALJAN \**mana* a) 'abode of the dead, Hades, God of Hades, total negation', (B 59, Sw 107 'no').

F *mana*, *manala* 'Hades of Kalevala', *manata* a) 'to conjure, to cast a spell'.

E *manada*, *mōnada* 'ibid.', Mordvin *munams* 'to cast a spell'.

Tam *māntu* 'to perish, to die', Kan *manu* 'spell, incantation, the name of Manu', Kuṛux *mal* 'not', *malā* 'not, no', *malnā* 'not to be so', Malto *mala* 'no, not' (DED 4743, 4811).

M *mancu* 'pestile'.

J *ma* 'Teufel, Satan', *mu* 'nichts'.

Q *mana* 'no, not', *manačiku* 'to worry'.

179. Proto-DURALJAN \**mana*- b) 'to say, to urge, to summon'.

F *manata* b) 'to summon before the court'.

Lappish *muonet* 'to name, to call', Mari *manam*, H *mond*, Yurak-Samoyed *māns*, *mānts* 'to say'.

Kan *manave* 'petition, request', Tam *manu* 'ibid.', Irula *maṇi* 'to talk', Tulu *maṇipuni* 'to speak (used chiefly in negative)' (DED 4671).

J *maneku* 'to invite'.

Q *mañā* 'to ask for'.

Note PU \**mōne-/mone-* 'sagen' (Rédei et al 1986), Sanskrit *man* 'think', and the groups 172 and 178.

180. Proto-DURALJAN \**mase* 'soft, mashed, tired, powerless'.

F *masea*, *masentunut* 'depressed', *mäsä* 'mashed'.

Komi *mudžni* 'to become tired, to exhaust', Mansi *moříšem* 'distress, want'.

Tam *maṭṭai* 'bluntness, inferiority', *maṭi* 'to be indolent, inactive', Malayalam *maṭikka* 'to grow tired' (DED 4647, 4652).

Q *machitayay* 'estar molido de cansancio, sin fuerza'.

181. Proto-DURALJAN \**mätä* 'rot, decay, pus', (Sw 123 'rotten').

F *mätä* 'rot, decay, pus, rotten etc.', *matajainen* 'boil, abscess, a skin disease of horses'.

ED *matt* 'pus of a pimple', *mäda* 'rotten, decayd, putrid', Mari *meks* 'dry, rotten wood'.

Tam *muttu* 'pustule, pock of a smallpox', *mutala* 'bad smell as of flesh', Malayalan *mutukkam* 'pimple' (DED 4961).

J *matsuge* 'trichiasis'.

Q *mata* 'wound on back of pack animals', *matu*, *matuq* 'impropio, mal hecho, errado', *mutki* 'to smell'.

Note the pair F *matala* 'low, flat, short, depressed' and Tam *mattana* 'smallness, inferiority'. Note also PFV \**mäčke* 'faul, morsch' (Rédei et al 1986).

182. Proto-DURALJAN \**mätü/mäöü* 'knot, bundle'.

F *mätäs* 'tuft, hummock', *mäystin*, *mälyke* 'leather strap for skis', *mytty* 'bundle, pack'.

E *mätas*, Mari *möde-bui*, Yurak-Samoyed *mäkt*, *mäkte* 'hummock, tuft'.

Tam *muti* 'to tie, fasten, make into a knot, tuft of hair, bundle', Telugu *mudi* 'knot, bundle', Tulu 'bundle of rice packed in straw', Malayalam *muti* 'knot, bundle of rice plant', Brahui *muttux* 'knot, bundle', Tam, Malayalam *mottam* 'whole, total' (DED 4921, 5119).

J *musubi* 'Knoten', *motou* 'tie up', *matou* 'to be enveloped in'.

Q *matuy* 'hacer gavillas', *matana-* 'to unite'.

Note PKJ \**mus-* 'bundle' (Martin 1966).

183. Proto-DURALJAN \**me* 'we', (Sw 182 'we').

F *me* 'we'.

E *me*, Mari *mā*, *me*, H *mi*, Selkup *me* 'we'.

Telugu *mēmu*, *nēmu*, *ēmu*, Kui *māmu*, *āmu* 'we' (DED 5154).

M *bide*, (gen. *bidenei*, *manai*), Turkish *biz*, *miz* 'we'.

Note PU \**me* 'wir' (Janhunen 1981).

184. Proto-DURALJAN \**meti* 'honey'.

F *mesi*, *meti-* 'honey, nectar'.

E *mesi* 'honey, nectar', H *méz* 'honey'.

Tam *maṭṭu* 'honey, Tulu *mitti* 'sweetness' (DED 4663).

J *mitsu* 'honig'.

Q *miski*, *mitki* 'suave, dulce, azúcar, miel', *miski* 'anything sweet'.

Note PFU \**mete* 'honey' (Rédei et al 1986) and Sanskrit *mi-ti*.

185. Proto-DURALJAN \**mecä* 'tree, forest', (B 89 'tree', Sw 196 'woods').

F *metsä*, FD *mettä*, *mehtä* 'forest', *metsästää* 'to hunt'.

E *mets* 'forest'.

Kuwi *metta* 'hill', Tam *mēṭu* 'hillock', Kan *mēḍu* 'rising ground', Kolami *modal* 'tree, trunk',

Tulu *madadu* 'log, trunk' (DED 5058).

Buryat *modo* 'Baum, Holz' (Bouda 1953).

J *matsu* 'Kiefer, Föhre'.

Q *matemate* 'planta', *matara* 'arbol grande'.

Note PFU \**mecä* 'Rand, Seite von etwas' (Rédei et al 1986).

186. Proto-DURALJAN \**mēs* 'man, husband', (B 49 'man', Sw 177 'husband').

F *mies* 'man, fellow, husband, gentleman'.

E *mees* 'ibid.', Mansi *mánsi* 'a Vogul', H *magyar* 'a Hungarian'.

Kolami *ma.s* 'man', Konḡa *māsi* 'husband', Kuṛux *mēt* 'adult man' (DED 4791).

M -*mad*, in *aqamad* 'der älteste der Brüder'.

J *masutā* 'chef, boss', *mazamaza* 'lebendig, vif'.

Q *masi* 'mate, fellow'.

Note PKJ \**bes/bec/bet* 'husband' (Martin 1966).

187. Proto-DURALJAN \**mi-* 'what' (Sw 84 'what').

F *mitā* 'what'.

E *mis*-(*mi-*), Mari *ma*, *mo*, H *mi*, Yenisei-Samoyed *mī* 'what'.

Telugu *ēmi*, Gondi *bāta* 'what' (DED 5151).

Turkish -*mī* 'interrogative enclite'.

Q *ima*, *imay*, *may* 'what'.

Note PU \**mʒ* 'was, Sache' (Rédei et al 1986).

188. Proto-DURALJAN \**mi* 'I', (B 41, Sw 78 'I').

F *minā*, FD *mā*, *mie* 'I'.

E *ma*, *mina*, Komi *me*, Hanti *mā*, *ma*, Yurak-Samoyed *mań* 'I'.

M *bi* 'I', *minu* 'my', Turkish *ben* 'I'.

J *mī* 'body, self, person'.

Note PU \**mun* 'I' (Janhunen 1981), OJ \**mi* 'I' (Miller 1971), and Q *ñuqa* 'I'. Compare F *kuuma*, Q *quńi* 'hot', the group 147.

189. Proto-DURALJAN \**mitta* 'step, measure, trip, way'.

F *mitta* 'measure', *mitata* 'to measure', *mittiloida* 'to step', *matka* 'journey, passage'.

E *mōōta* 'to measure'.

Tam *mattam* 'measure, limit, rule, similar', Kan *mattam*, *masa* 'measure', *mettu* 'to put or place down the foot or feet' (DED 4660).

M *mety* 'as, like similar'.

J *michi* 'Weg, Pfad, Mittel'.

Q *mitka-* 'to trip with the foot', *mīta* 'epoca, vez'.

Note the triplet F *mitātōn* 'valueless, worthless', Tam *mīti* 'to tread on, to trample on, dishonour' (DED 4861), Q *mitu* 'mud', *mītu* 'to make mud', and the group 199. Note also PKJ \**mats(a)* 'correct' and PKJ *masu* 'measure' (Martin 1966).

190. Proto-DURALJAN \**moni* 'many, numerous', (B 50, Sw 95 'many').

F *moni*, *monta* 'many, numerous'.

E *mōni* 'many', H -*ven*, -*van*: *negyven* '40', *hatvan* '60'.

Tam *mantai* 'flock, herd', Telugu, Gondi, Konda *manda* 'herd', Telugu *mendu* 'plenty, much' (DED 4700).

M -*ben* in *gurben* 'three', *dərben* 'four'.

J *man* 'Zehntausend', *manman* 'endlos'.

Note PFP, PFU? \**mone* (mune) 'eine gewisse Quantität, viel' (Rédei et al 1986) and PKJ \**manx(ye)*- 'many' (Martin 1966).

191. Proto-DURALJAN \**muxa*- 'to have sexual intercourse'.

F *muhoilla*, *myhällä* 'to smile', *muhinoida* 'to have sexual intercourse'.

E *muhelda* 'to smile'.

Kan *mōha* 'the state of being unarmoured, affection, love (with or without sound judgement)'.

Turkish *muhip* 'liebend'.

J *moyasu* a) 'die glühende Liebe'.

Q *muyay* 'unirse sexualmente los animales'.

192. Proto-DURALJAN \**muyu* 'venom'.

F, OF *muju* 'venom, dyeing fluid, hot ashes', *mojova* 'smarting, burning'.

E *mōjuda* 'to have effect, to be effective'.

Tam *mai* 'ink, ink-paste', *mayakku* 'mental delusion, stupor', Telugu *maikomu*, *maida* 'intoxication', Toda *moy* 'ashes' (DED 5101, 4706).

J *moyasu* b) 'to burn'.

Q *miyu* 'venom'.

193. Proto-DURALJAN \**muku*- 'child, brad' (Sw 20 'child').

F *mukula* 'brad, tuber'.

E *mugul* 'tuber', Mari *muyul* 'tuber'.

Tam *maka* 'child, infant', Kan *maga*, *muka* 'son'.

Tungusic *muxali* 'globular'.

Q *muqu* 'knob, knee, club', *muquti* 'small person, dwarf'.

Note PFP \**muk3-l'a* 'Knollen, Geschwulst' (Rédei et al 1986).

194. Proto-DURALJAN \**muna* 'testis, egg', (B 23, Sw 38 'egg').

F *muna* 'testis, egg'.

E *muna*, Mordvin *mona*, H *mony* 'testis, egg', Yenisei-Samoyed *mona* 'egg'.

Gondi *mēnj*, Kui *mēnju* 'egg', Malayalam *māṇi* 'penis', Tam *muṇtai* 'egg', *māṇi* 'penis', *muṇai* 'to be zealous, to be deeply engaged', Malayalam *muni* 'excited' (DED 4805, 4939, 5088).

M *munaid* 'excess, outrage', Old Turkish *munaid* 'mentally confused'.

Q *muna-* 'to want, to love'.

Note PU \**munā* 'Ei' (Janhunen 1981), PU \**muna* 'Ei, Hode' (Rédei et al 1986) and Sanskrit *man* 'male sexual organ'.

195. Proto-DURALJAN \**murxa* a) 'enormous big, large'.

F *murha* a) 'enormous big' (Toivonen et al 1958).

Tam *mu.ru* 'all, entire, whole' (DED 4992).

J *mura, mure* 'Haufe, Gruppe, Menge, Volk'.

Q *murū, murumuru* 'todos'.

Note PKJ \**mur(ye)* 'crowd' (Martin 1966).

196. Proto-DURALJAN \**murxa-* b) 'to kill, to murder, to destroy', (B 42, Sw 82 'to kill').

F *murjoa* 'to abuse', *murskata* 'to crush', *murtaa* 'to break', *murhata* 'to murder'.

E *murda* 'to break, to mutilate, to destroy', *mōrvata* 'to murder', H *mar* 'to bite, to gnaw, to wear away'.

Tam *muri* 'to break off, to ruin, to defeat', *murukku* 'to destroy, to kill, to break', *muraka* 'man who breaks or ruins'.

M *murui-* 'to bend, to turn'.

J *muri* 'forcing, Zwang'.

Q *murjuy* 'gastarse', *murqu* 'second hand, used'.

197. Proto-DURALJAN \**murū* 'crumb, bit'.

F *murū* 'crumb, bit, particle, piece'

E *murū* 'ibid'.

Tam *muri* 'piece, bit'.

Turkish *murdar* 'schmutzig'.

J *mura* 'speckled, in spots'.

Q *murū* 'seed, spotted'.

Note the group 195 and 196, PU \**mura(mur3)* 'Stück, Körnchen' (Rédei et al 1986), and PKJ \**mor(ó)* 'to be fragile' (Martin 1966).

198. Proto-DURALJAN \**muca* 'black, dirty, mole'.

F *musta* 'black, dark', *mustata* 'to defame, to blacken'.

E *must* 'black, dirty', *mustata* 'to defame, to blacken'.

Tam *mācu* 'darkness, cloud', *maccu* 'blemish, fault, that which is improper', *maccam* 'mole on the skin', Kan *masi* 'black colour', *masamasa* 'darkness', *macca* 'black speck

or spot on skin', Telugu *macca*, *masa* 'mole, stain', *masi* 'blackness, charcoal' (DED 4781, 4629, 5101).

Q *machai* 'cueva, gruta; borrachera'.

Note PFU *muč3* 'irgendein Krankheit' (Rédei et al 1986).

199. Proto-DURALJAN \**muḍa* 'mud'.

F *muta* 'mud, mire'.

E *muda* 'mud, mire', Mordvin *moda* 'earth, soil, mould'.

Kan *midi* 'to pound, to rub, to grind', Telugu *medugu* 'to be pounded or ground' (DED 4861).

Q *mitu* 'mud', *mituy* 'hacer barro'.

Note PFV \**muḍa* 'Erde, schlammige Erde, Schlamm' (Rédei et al 1986) and Nostratic connections.

200. Proto-DURALJAN \**mūkā* 'dumb, mute, silent' (Sw 33 'dull').

F *mykkā* 'dumb, mute, silent'.

E *mükk* 'ibid.'.

Telugu *mūga* 'dumb', Tam *mūṇkai* 'dumb person' (DED 5026).

M *moxu-* 'to be blunt or dull'.

J *mokusuru* 'Schweigen, Verstummen', *mokumoku* 'stumm, schweigend'.

Q *mukikui* 'disimulación', *mukiy* 'disimular', *mukikuy* 'no comunicar'.

Note Sanskrit *mūka-* 'dumb' and A *mute*.

201. Proto-DURALJAN \**nāke-* 'to see', (B 69, Sw 130 'to see').

F *nāhdā* 'to see', *nākyā* 'to be visible', *nākō* 'sight, eyes, vision', *naakata* 'to lurk for'.

E *nāha* 'to see', Lappish *niekko* 'dream', Mordvin *nejems* 'to see', H *néz* 'to look', Mansi *neyi* 'to be visible'.

Tam *nōkku* 'to see, to look at', Tam *nāṭu* 'to seek', *nāṭṭam* 'eye, sight', Tulu *nāḍuni* 'to see', Kan *nōdu* 'to look, to look at' (DED 3794, 3637).

M *nidy(n)* 'eye', *nidyē-* 'to see'.

J *nagame* 'Aussicht', *nagameru* 'überblicken, betrachten, fixieren'.

Q *ñawi*, 'eye'.

Note F *naatta* 'a seeking game of children', Tam *nāṭu* 'to seek', and PFU \**nāke-* 'sehen, schauen' (Rédei et al 1986).

202. Proto-DURALJAN \**nai-* 'women' (B 98, Sw 194 'woman').

F *nainen* 'woman', *naida*, FD *naijja* 'to marry, to copulate with a woman'.

E *naine* 'woman', Hanti *naj* 'lady'.

Tam *naya* 'to desire greatly, to love', Kan *naya* 'softness, mildness', Telugu *naya* 'beauty', *navalā* 'woman' (DED 3602).

M *nai* 'friendship', *nair* 'accord, harmony'.

J *naii* 'der persönliche Wunsch', *naien* 'die frei Ehe'.

Q *naya-* 'to give desire', *nayay* 'desear, tener ganas'.

Note PU \**nāxi* 'Frau' (Janhunen 1981) and Chinese *nāi* 'Brüste, Milch, Frau, Mutter'.

203. Proto-DURALJAN \**naka-* 'to throw, to cast'.

F *nakata* 'to throw, to cast'.

E *nakata* 'to gave a disease'.

J *nageru* 'werfen'.

About the meaning note the groups 39 and 401.

204. Proto-DURALJAN \**nālkā* 'hunger'.

F *nālkā* 'hunger'.

E *nālg* 'hunger'.

Tam *nalañku* 'to grow faint, to suffer, to pine', *nali* 'to waste, to pine away', *nalkūr* 'to suffer, to be wearied', Tulu *nalaguni* 'to fade, to wither' (DED 3611).

Q *mallakay* 'tener hambre'.

Note PFU \**rólke* 'Speichel, Schleim, Rutz' (Rédei et al 1986).

205. Proto-DURALJAN \**naru* 'cord, string, rope' (Sw 122 'rope').

F *naru*, *nuora* 'cord, string, rope', *naara* 'drag, dragline'.

ED *nör* 'cord, rope'.

Tam *nār*, Kan *nār* 'fibre, string, cord, rope', Tulu *nūru* 'fibrous bark or hemp of plants' (DED 3651).

Tungusic *riuri-hta* 'Haar' (Bouda 1953).

206. Proto-DURALJAN \**nato* 'sister-in-law'.

F *nato* 'the sister of the husband'.

E *nadu*, Mari *nuōo* 'the sister of the husband', Yurak-Samoyed *nado* 'brother-in-law'.

Tam *nāttanār*, *nātti*, *nāttān* 'husband's sister', Kan *nāduni* 'ibid' (DED 3644).

J *natto* 'Mutter'.

Q *ñaña* 'woman's sister'.

Note PU \**nats* 'Schwägerin' (Rédei et al 1986).

207. Proto-DURALJAN \**nawra-* 'to laugh' (Sw 85 'to laugh').

F *nauraa* 'to laugh'.

E *naerda* 'to laugh'.

Tam *naku*, Kan *nagu*, Telugu *navvu*, Parji *nav-* 'to laugh' (DED 3569).

J *warau* 'lachen'.

208. Proto-DURALJAN \**nel-* 'four', (Sw 57 'four').

F *neljä* 'four'.

E *neli*, Komi *nol*, *nul*, H *négy* 'four'.

Tam *nāl*, *nālu*, *nāṅku*, *nālku*, Kan *nāl*, *nālku*, *nāku* 'four' (DED 3655).

M *dφrben* 'four', Chuvash *tāvata* 'four'.

J *yo*, *yotsu* 'four'.

Q *tawa* 'four'.

Note PFU \**rielja* (*neljä*) 'vier' (Rédei et al 1986) and OJ \**yö-tu* 'four' (Miller 1971).

209. Proto-DURALJAN \**nei-* 'to sew, to knit', (Sw 132 'to sew').

F *neuloa* 'to sew, to knit'.

E *nōel* 'needle'.

Tam *ney*, Kan *nēyu* 'to weave as clothes', Telugu *nēyu* 'to weave' (DED 3745).

M *neile-* 'to unite', *neid-* 'to be joined', *neke-* 'to knit'.

J *nui* 'das Nähen', *nuu* 'nähen, sticken'.

Q *nalla* 'basta'.

210. Proto-DURALJAN \**nele-* 'to swallow'.

F *niellä* 'to swallow'.

E *neelata*, *neelda*, Komi *niini*, H *nyelni*, Yurak-Samoyed *nällä* 'to swallow'.

Tam *noḷ* 'to swallow', Telugu *nollu* 'to suck fingers' (DED 3791).

Note PU \**riele-* (*riële-*) '(ver)schlucken, (ver)schlingen' (Rédei et al 1986).

211. Proto-DURALJAN \**nine* 'bast'.

F *niini* 'bast', *niinipuu* 'linden(tree)'.

E *niin*, Komi *nin*, Mari *nii* 'bast'.

Tam *nāṅ*, Kan *nēṅ* 'cord, rope', Tam *nīṅa* 'to braid', Toda *nīṅ*, 'twisted string', Tulu *niné* 'wick' (DED 2909, 3668).

Note PFP \**nine*, (*riine*) 'Bast, Lindenbast' (Rédei et al 1986).

212. Proto-DURALJAN \**nimi* 'name', (B 55, Sw 100 'name').

F *nimi* 'name', *nimetä* 'to name, to mention, to call, to say'.

E *nimi*, Komi *nim*, Mansi *nām*, Yurak-Samoyed *nim* 'name'.

Tam *ninai* 'to think, to know', Kan *nene*, *nenasu* 'to think, to think upon, to bear in mind' (DED 3683).

M *nim* 'mark, sign'.

J *na*, *namae* 'Name', *nanoru* 'sich nennen'.

Q *ni*- 'to say, to tell', *nina* 'palabra'.

Note PU \**nimi* 'Name' (Janhunen 1981), *nime* 'Name' (Redei et al 1986).

213. Proto-DURALJAN \**niti*- 'to crush, to kill'.

F *nitistää*, *nutistaa* 'to snuff out, to kill'.

E *nottida* 'to kill'

Tam *naci* 'to be crushed', *nutu*, *natu* 'to destroy, to quench' (DED 3574, 3590).

M *nitula*- 'to kill', *nicala*- 'to break into pieces'.

Q *ñutu*- 'to crush'.

214. Proto-DURALJAN \**nito*- 'to stich, to sew'.

F *nitoa* 'to stich, to sew'.

E *niduda* 'to stich, to sew, to fasten together', Mordvin *neda* 'to bind, to tie, to fasten together'.

M *nisaci*- 'to squeeche, to press'.

Q *ñiti*- 'to squeeche together'.

Note PFP \**ñiḍa*-, *ñiḍä*- 'befestigen, heften, binden' (Redei et al 1986).

215. Proto-DURALJAN \**nūr* 'lake, water', (B 94, Sw 183 'wet, Sw 84 'lake').

F *noro* 'vale, glen, small stream, damp, marshy ground', *norua* 'to flow, to run, to ooze'.

E *nire* 'brook', Komi *nur*, Yurak-Samoyed *nor* 'swamp'.

Tam *nir* 'water, sea', Kan *nir*, *niru* 'water' (DED 3690).

M *nuur*, *nayur* 'lake, pond, a dry lake bed', *nor*- 'to become wet, damp, moist'.

J *nureru* 'nass werden'.

Q *nuyu* 'wet, to wet'.

Note F *järvi* and Lappish *jaur* 'lake', and PU \**ñor3* 'Sumpf' (Rédei et al 1986).

216. Proto-DURALJAN \**nukí* 'club, mace'.

F *nuija* 'club, mace', *nuijia*, *nukittaa* 'to strike'.

E *nui* 'club, mace', Komi *nes* 'a big wooden hammer'.

Tam *nukku* 'to crush' (DED 3728).

J *naki* 'verstorben'.

Q *naka*- 'to slaughter'.

Note PFP \**nušja/nošja* 'Keule' (Redei et al 1986) and PKJ \**nóg(e)* 'to release' (Martin 1966).

217. Proto-DURALJAN \**nuke-* 'to complain'.

F *nukertaa* 'to complain'.

E *nukrus* 'melancholy, blue'.

Tam *neku* 'to suffer', Kan *negara* 'suffer' (DED 3733).

J *naku* 'weinen'.

Q *ñakari-* 'to suffer'.

Note PKJ *náky-* 'to sob' (Martin 1966).

218. Proto-DURALJAN \**nole-* 'to lick'.

F *nuolla* 'to lick'

E *noolida*, Komi *nulni*, H *nyal*, Tavgi *ñu-* 'to lick'.

Tam *nā*, *nāvu*, Kan *nālage*, *nālige*, Telugu *nālika* 'tongue', Tam, Kan *nakku*, Telugu *nāku* 'to lick' (DED 3633, 3576).

M *dolija-* 'to lick'.

J *nameru* 'to lick, to taste'.

Q *ñuti*, *ñoti* 'moco, mucus'.

About the sound in Mongol note the groups 208 and 219. Note also PU \**riole/riole-* 'lecken' (Rédei et al 1986) and PU \**ñā(x)(l)3-* 'lecken' (Janhunen 1981).

219. Proto-DURALJAN \**nođi* 'fire, campfire', (B 27, Sw 48 'fire').

F *nuotio* 'campfire, bonfire'.

Karelian *nuotivo*, Komi *nodja*, Mansi *nūtiā* 'campfire'.

Pengo, Kui *nāñi*, Kui *nāñi* 'fire' (DED 3640).

M *dφly*, *nφle* 'flame, fire'.

J *nenshō* 'Verbrennung'.

Q *nina* 'fire, flamme'.

Note PKJ \**nyoř-* 'to scorch'.

220. Proto-DURALJAN \**okse-* 'to vomit', (Sw 177 'to vomit').

F *oksentaa* 'to vomit'.

E *oksendada*, Mordvin *uksnoms*, Mari *uksenzam*, Hanti *āyeta* 'to vomit'.

Kan *okk-* 'to vomit', *ogadisu* 'vomiting' (DED 1024).

M *oysi-* 'to vomit'.

Q *aqtu-* 'to vomit', *okiay* 'vomitar'.

221. Proto-DURALJAN \**ol-* 'to be, to exist'.

F *olla* (1. sg. *olen*, 3. sg. *on*) 'to be, to have'.

E *olla*, Mordvin *ule*, H *val-*, *vol-* 'to be, to have'.

Tam, Malayalam *uḷ* (1. sg. *uḷēṇ*, 3. sg. *uṇṭu*) 'to be, to have', Tam *iru* 'to exist, to remain etc. (DED 697, 480).

Turkish *ol-* 'to be', M *ol-* 'to find, to get', *bolox* 'werden, geschehen, sein'

J *ori* 'to be, to live'.

Note PFU \**wole-* 'sein, werden' (Rédei et al 1988).

222. Proto-DURALJAN \**oŋ-* 'cavern, cavity'.

F *onkalo*, *ontelo* 'cavern, cavity'.

Karelian *onkura* 'cavern', Mansi *wonka* 'ditch, grave'.

Tam *vaŋku* 'cave, cavern', Tulu *oŋka* 'hole of rats, snakes etc.' (DED 5212).

M *ongxur* 'cavity'.

J *ana* 'hole, cavity'.

Note the group 14. Note also PU \**āni* 'Mund, Öffnung' (Janhunen 1981), PFU \**oŋte* 'Höhle, Höhlung' (Rédei et al 1986), and Tahitian and Waskia *ana* 'cavern'.

223. Proto-DURALJAN \**oŋki* 'hook, fishhook'.

F *onki* 'fishhook', *onkia* 'to angle'.

E *ōng* 'fishhook', Mari *ongo* 'hook'.

Kan *oŋki* 'hook' (DED 521).

Note PFV \**oŋke* 'angel, angeln' (Rédei et al 19869), and Sanskrit *anka*, Latin *uncus* 'hook'.

224. Proto-DURALJAN \**ota* 'spear', \**ota-* 'to take', (Sw 73 'hit').

F *ota* 'spear', *otella*, 'to fight', *ote* 'grip, hold', *otus* 'catch animal', *otso*, *ohto* 'bear', *ottaa* 'to take', *osua* 'to hit', *osata* 'to hit, to be able, to know how'.

E *oda* 'spear', *osata* 'to can, to be able, to hit', *vōtta* 'to take, to grip', Hanti *oŋtaw*, Mansi *owta* 'spear'.

Tam *ēcu* 'to dart', *aṭu* 'to kill, to conquer', Kan *esu*, *ese* 'to shoot an arrow, to throw', Kolami *aṭ* 'to hit' (DED 805, 77).

M *aca-* 'to catch or be caught on something', *aca(n)* 'fork', M *øtege* 'bear', Old Turkish *aṭ-* 'to throw, to shoot', *uṭ-* 'to beat'.

J *ataru*, *ateru* 'to hit, to strike', *atari* 'hit', *oshi* 'Lehre'.

Q *ati-* 'to be able', *atipa-* 'to beat, to win'.

Note PU\* *or̥tʰ* 'Stachel, Spies' (Rédei et al 1987) and PKJ\* *but-/botx-/bwat-* 'to hit' (Martin 1966). Note also Latin *ursus* and Spanish *oso*. A large family of primeval hunting terms?

225. Proto-DURALJAN \**oca* 'forehead, front, head', (B 37, Sw 68 'head').

F *otsa* 'forehead, head, front, face'.

E *ots* 'end, point, tip, head, forehead'.

Tam, Malayalam *ucci* 'crown of the head'.

J *atama* 'Kopf, Haut, Spize'.

Q *uya* 'rostro, faz'.

Note the set 224 and PFP, FU? \**or̥ca* 'Vorder, Vorderes, Vorderteil' (Rédei et al 1987).

About the meaning, note also the set F *pää*, E *pea*, H *fó*, *fej* 'head, end', Tavgi *feai* 'end',

Kan *pai* 'upper, external, extra, upon', Telugu *pai*, *payi* 'upper surface, top, upper upon, above', J *ho*, OJ *po* 'head'.

226. Proto-DURALJAN \**pāc-* 'to fast'.

F *paasto* 'fast'.

E *paast* 'fast'.

Telugu *pastu* 'fast', Tam *paci*, Kan *pasi* 'to be hungry, hunger' (DED 3825).

Note A *fast* etc.

227. Proto-DURALJAN \**pay-* 'to pet'.

F *paijata* 'to pet', *paija* 'toy'.

E *paitada* 'to pet'.

Tam *payal*, *paiyal*, *paital*, *pacal* 'boy', Tulu *paiyya* 'child' (DED 3939).

M *boila-* 'to nurse, to look after'.

J *bāya* 'Säügamme, alte Magd'.

Q *paya* 'old woman'.

Note the set F *poika* 'boy', J *bōya* 'boy, Söhnchen', and M *boizi* 'to grow up'. Note also PFU \**pojka* 'Sohn, Knabe' (Rédei et al 1987).

228. Proto-DURALJAN \**paki-* 'to shine', (B 80, Sw 157 'sun', Sw 26 'day').

F *paistaa* 'to shine, to roast, to bake', *päivä* 'day, sun'.

E *paista* 'to shine', 'to be visible'.

Tam *pakar* 'to emit lustre', *pakal* 'day, daytime, the morning sun', *paka-pakav-enal* 'onom. expression of crackling of fire', Gonda *peyal*, *payal* 'a day' (DED 3005, 3802).

J *hikaru*, OJ *pikaru* 'to shine, to be bright'.

Q *paqari-* 'to dawn'.

Note PU *\*pājwā* 'Sonne, Tag, Wärme' (Janhunen 1981) and PFU *\*pājwā* 'Feuer' (Rédei et al 1987).

229. Proto-DURALJAN *\*paya-* 'to speak much'.

F *pajattaa* 'to speak much'.

E *pajatada* 'ibid.'.

Tam *payil* 'to tell, to say' (DED 3943).

230. Proto-DURALJAN *\*payu* 'willow, salix'.

F *paju* 'willow, salix'.

E *paju*, Komi *paid*, Yurak-Samoyed *paju* 'ibid.'.

Tam *valli*, Kan *balli* 'creeper, climber', Tam *vallai* 'creeping bindweed' (DED 5316, 5318).

Q *wayaw* 'willow'.

Note PU *\*pajā* 'eine Salix-art' (Rédei et al 1987), Sanskrit *valli* 'creeper' and A *willow* etc.

231. Proto-DURALJAN *\*paka* 'back, hidden', (Sw 6 'back').

F *pakara* 'buttock, *pako* 'flight', *paeta* 'to flight'.

E *paguda*, *pakku minna* 'to flight', Mari *pokte-* 'to drive away'.

Parji *pakk-* 'to hide oneself', Gabda *pak-* 'to hide', Tam *pakar* 'to shift, to move' (DED 3810, 3803).

M *bḥkse* 'backside, rumpf', *bḥgleggyde-* 'to hide', *buxur* 'buttock, rumpf'.

J *baka* 'Dummkopf, Idiot', *bakku* 'back' (loan?).

Q *paka* 'anything hidden, to hide'.

232. Proto-DURALJAN *\*paki-* 'to speak, to chatter'.

F *pakista* 'to speak, to chat'.

Lappish *pakot* 'to speak'.

Tam *pakar* 'to tell, to say' (DED 3804).

233. Proto-DURALJAN *\*pak-* 'to break' (Sw 148 'to split').

F *pakkua* 'to break', *pykiä* 'to become rough (of skin)'.

E *pagu* 'spar', *pakatada* 'to split, to break, to become rough, to blossom', H *fakad* 'to blossom, to burst, to come out'.

Tam *paku* 'to be split, divided, to cut into pieces' (DED 3808).

J *bakuro* 'Explosion, Enthüllung, Entlarvung, enthüllen etc'.

Q *paki* 'to be split, broken, to break'.

Note PFU *\*pakka-* 'borsten, aufplazen' (Rédei et al 1987), PKJ\* *bak-* 'to change' and PKJ *\*paqy-* 'to cut' (Martin 1966).

234. Proto-DURALJAN \**paku-* 'yellow', (B 100, Sw 200 'yellow').

F *pakkunen* 'Bidens tripartitus, a plant used for dyeing yellow'.

Vepsic *pakustada* 'to dye yellow'.

Tam *pacu* 'green, yellow', Kan *paccu* 'greenness, yellowish, golden color', Telugu *pacca* 'green, yellow' (DED 3821).

Q *pako* 'hierba de la puna amarillenta'.

235. Proto-DURALJAN \**pala* 'bit, piece, particle'.

F *pala* 'bit, piece, particle'.

E *pala* 'ibid.', H *falat* 'mouthful, bit'.

Tam *pāl*, Malayalam, Kan *pāl* 'part' (DED 4097).

M *bylyg* 'group, division', *bylygtei* 'divided into parts'.

J *barabara* 'in Stücken', *barasu* 'in Stücken hauen'.

Note PU \**pālā* 'Mundbissen' (Janhunen 1981), PU \**pala* 'bissen, fressen' (Rédei et al 1987), and A *part*.

236. Proto-DURALJAN \**pala-* 'to burn, to glow', (B 12, Sw 19 'to burn').

F *palaa* 'to burn, to glow'.

E *palav* 'heat, fierce', Mordvin *paloma*, *palamo* 'to burn', H *fagy* 'frost'.

Tam *paḷapaḷa* 'to glitter, to shine' (DED 4012).

M *bylije* 'to warm up'.

Note PFU\* *pal'a* 'frieren, Frost' (Rédei et al 1987).

237. Proto-DURALJAN \**palyo/pālo* 'much, many', (B 50, Sw 95 'many').

F *paljon* 'much, a lot, many'.

E *palju* 'much, many', Mansi *pal*, *pāl* 'thick, dense'.

Tam *pala* 'many, several' (DED 3978).

M *bultu* 'all, whole, entire, completely', *olan* 'many'.

J *-bara* 'a plural suffix'.

Q *pallii* 'exceso'.

Note PU \**paljā* 'dicht, dick, viel' (Rédei et al 1987).

238. Proto-DURALJAN \**palk-* 'to bifurcate, to split'.

F *palko* 'pod', *palkokieli* 'liar', *palkki* 'beam, timber, balk'.

ED *palg* 'pod' (Toivonen et al 1958), *palgi-* 'timber, balk', H *balék* 'gullible'.

Tam *puluku* 'to tell barefaced lies', Telugu *burudā* 'lie', Kurux *palknā* 'to cut lengthwise' (DED 4324, 3991).

M *bylygelze-* 'to speak indistinctly', *bylygtei* 'divided into part'.

J *barari-to-kiru* 'to cut in two'.

Q *palljuy* 'mentir', *paĩqa* 'anything forked, bifurcated'.

Note PU *\*pālā* 'Hälfte' (Janhunen 1981, Redei et al 1987) and A *balk, fork, forked tongue*.

239. Proto-DURALJAN *\*pane-* 'to put'.

F *panna* 'to put, to lay down, to place, to lay a woman'.

E *panna* 'to put, to place', Komi *pon-* 'to lay a woman', Mansi *pon-* 'to place, to lay', Selkup *pan-* 'to lay'.

Tam *pūn* 'to put on, to be caught', Kan *pūn* 'to fix (as an arrow)', Tam *pan* 'service, work, business', *pani* 'act, action', *punar* 'to join, to copulate' (DED 4361, 3884).

Q *punya-* 'to hit, to strike', *puñay* 'trabajar, preparar'.

Note PU *\*pjinj-* 'legen' (Janhunen 1981) and PU *\*pane-* 'legen, stellen' (Rédei et al 1987).

240. Proto-DURALJAN *\*pari-* 'to blame'.

F *parjata* 'to blame, to speak ill of'.

E *parastada* 'to scold, to blame'.

Tam *pa.ri* 'to blame', Malayalam *pa.ri* 'fault, false accusation', Kan *pa.ri* 'to scold' (DED 4002).

M *buruyusija* 'to blame, to accuse'.

J *bari* 'Beschimpfung, Schmähung'.

Q *parja* 'que resalta'.

Note A *blame* and e.g. Tahitian *pari* 'accuser'.

241. Proto-DURALJAN *\*park-* 'to cry, to yell'.

F *parkua, porata* 'to cry, to yell'.

ED *parguma* 'to cry, to yell, Mansi *pūrqa* 'to howl'.

Tam *paracu* 'to praise', Malayalam *parikka* 'a wow', Kota *parkym* 'wow to a good' (DED 3951).

242. Proto-DURALJAN *\*pask-* 'excrement', *pās-* 'to let go, to release'.

F *paska* 'shit, excrement, feces', *päästää* 'to let go, to release, to deliver, to loose, to untie', *päästö* 'release, discharge'.

E *pask* 'shit, feces, diarrheic feces', *päästa* 'to deliver, to save'. H *fos* 'diarrhea, feces', Tam *pācaṇam* 'diarrhea', Kan *bāsu* 'to void excrements, Telugu *pācanamu* 'evacuation of the bowels' (DED 4056).

M *basxa* 'to smoke profously, to emit puffs'.

Q *paska-* 'to untie', *paskay* 'desatar, perdonar, destorcer', *paske paske* 'de labios quemados por el sol'.

Note PFU \**pučka* (*pačka*) 'dünner Kot, laxieren' (Rédei et al 1987), and PKJ \**paxy* 'to spit'.

243. Proto-DURALJAN \**peyte* 'cover, shelter, quilt'.

F *peitto* 'cover, shelter, quilt', *peittää* 'to cover, to conceal'.

E *peitta* 'to cover, to conceal, to hide'.

Tam *putai* 'to bury, to conceal, to hide, to cover, to clothe', *putavai* 'cloth, garment', Malayalam *puṭa* 'a cover, outer garment' (DED 4509, 4256).

J *futa* 'Deckel, Haube, Klappe'.

Q *pača* 'clothing, *pačač* 'to dress, to clothe'.

244. Proto-DURALJAN \**pele-* 'to fear', (Sw 45 'fear').

F *pelko* 'fear', *pelätä* 'to be afraid, to fear', *pelkuri* 'coward'.

E *pelg* 'to fear', H *fél* 'to fear', *félem* 'fear'.

Tam *pērkani* 'to be afraid', Kan *pelagu* 'fear, alarm', Telugu *pelukuru* 'to fear, to be alarmed', Kan *belkane* 'to turn pale through fear' (DED 4419).

Tungus *hööl-* 'to fear'.

J *futame* 'fürchterlich, grauenhaft'.

Note the set 379 and PU \**pele-* '(sich) fürchten' (Janhunen 1981), PU \* *pele-* 'ibid.' (Rédei et al 1987).

245. Proto-DURALJAN \**penä-* 'to insist'.

F *penätä* 'to insist'.

Karelian *penäiä* 'to press (with questions etc)', H *fenyeget* 'to menace'.

Tam *pinakkam* 'disagreement', Malayalam *pināṇṇuka* 'to quarrel', Kan *peṇagu*, *peṇasu* 'to wrangle, to quarrel' (DED 4166).

Q *penjay* 'avergonzar', *penjai* 'afrenta', *pinqa-* 'to criticize', to complain', *penjanakuy* 'hacerse avergonzar mutuamente'.

246. Proto-DURALJAN \**petta-* 'to deceive'.

F *pettää* 'to deceive', *pettu* 'mixed hungerbread', *petos* 'deceit'.

E *pettu* 'to deceive'.

Tam *pettu* 'lie, deceitful word', Telugu *peccu* 'rind, peel' (DED 4391, 4384).

M *byte* 'verdict werden'.

J *futei* 'Betrug, Untreu', *futagokoro* 'Verräterei',

Q *pitu-* 'to mix two things together', *pitu sonjo* 'de corazón doble'.

Note Anttonen and Hakola (1994).

247. Proto-DURALJAN \**piska* 'gum, pitch'.

F *pihka* 'gum, pitch'.

E *pihk* 'gum, pitch', ED *pihkama* 'to ooze'.

Tam *picupicu* 'to be moist, sticky, viscous or adhesive', *picin* 'gum', Telugu *pisunū* 'gum' (DED 4134).

J *bishabisha* 'schlupfrig, schlammig'.

Q *pisja* 'moco'.

Note F *pisa*, *pisu*, *pisukka*, Karelian *pisero*, *pisu* 'female genitals', *pisuttoa* 'to lay a woman', and Q *pisay* 'unirse sexualmente', *pichuski* 'empeine'. Note also PFU \**piška* 'Baumharz' (Rédei et al 1987), A *pitch* and Sanskrit *picchā-* 'gum, slimy saliva'.

248. Proto-DURALJAN \**pila-* 'to deride'.

F *pilkata* 'to deride', *pilkka* a) 'scorn, ridicule', b) 'blaze, mark'.

E *pilada* 'to spoil', *pilk* 'blaze'.

Tam *piṛai* 'to do wrong, to fail, fault, defect' (DED 4187).

Q *pillay* 'engañar, enredar'.

249. Proto-DURALJAN \**pilli* 'pipe, flute'.

F *pilli* 'pipe'.

E *pill* 'pipe, bagpipe', H *furulya* '(shepherd's) flute'.

Tam *pillān-kūral* 'flute', Telugu *pillan-gōvi* 'flute, flageolet', Konda *piruri* 'flute' (DED 4197).

Q *pirutu* 'flauta de hueso o caña'

Note Nostratic connections.

250. Proto-DURALJAN \**pilw-* 'cloud', (B 14, Sw 21 'cloud').

F *pilvi* 'cloud'.

E *pilv*, Mari *pil*, H *felhō*, *felleg* 'cloud', Yurak-Samoyed *pūlw* 'thin cloud'.

Toda *pīlmoz,m* 'mist in valleys or on hills', Kodagu *pu.li* 'mist on mountains', Tam *puyal* 'cloud, raining' (DED 4375, 4467).

Turkish *bulut* 'Wolke'.

Q *puyu* 'cloud'.

Note PU \**pilmi-* 'dunkel sein' (Janhunen 1981), PU \**pil'm3* 'dunkel, dunkel werden', and PFU \**pilwe* 'Wolke' (Rédei et al 1987).

251. Proto-DURALJAN \**pin-* 'to stretch'.

F *pingoittaa* 'to stretch', *pinkeä* 'tight, stretched', *pintta*, *piitta* 'a plate for stretching the pelts of furred animals', *pinta* 'surface, plane', *pinne* 'tension, tretch'.

E *pingutada* 'to stretch', *pingne*, *pinev* 'stretched', *pind* 'surface, plane'.

Tam *piñai* 'to tie, to entwine' (DED 4160).

J *pinto* a) 'die Nerven sind ausgespannt', b) 'ein Seil aufspannen', *pinchi* 'Klemme, Not'.

Q *pintu-* 'to wrap up'.

Note the paar F *pinkoa* 'to hasten away, to run fast' and Q *pinku-* 'to jump'.

252. Proto-DURALJAN \**pūrū* 'snowfall, rain' (B 63, Sw 115 'rain').

F *pirotaa* 'to rain', *pyry*, *purku* 'snowfall, snowstorms'.

Karelian *pūrū* 'snowstorms', Komi *pira*, Hanti *porki*, Selkup *purgaat* 'drifting of snow'.

Tam *para* 'to spread', Kui *buru*, *burku* 'fine rain', Gondi *pirr*, *pir*, *pīr*, Konda *pīru* 'rain' (DED 4288, 3949, 4199).

M *boruyala-* 'to rain', *burgi-* 'to rise in clouds', *buryani-* 'for the snow, to fall', Old Turkish *bor* 'storm'.

J *furi* 'Regen', *furu* 'it is raining', *boroboro* 'stückweis tropfen'.

Q *para* 'rain, to rain'.

Note PFP, U? \**purkə* 'Schneegestöber, stöbern' (Rédei et al 1987), PKJ\* *por-* 'to blow, and PKJ \**pár(y)* 'to spread it' (Martin 1966).

253. Proto-DURALJAN \**pisa-* 'little, small', (B 74, Sw 140).

F *piskuinen*, *pikku-*, *pieni* 'little, small', *pisara* 'drop'.

E *pisike* 'little, small', *pisar* 'tear', H *pici*, *picike* 'little, small'.

Tam *picir* 'drain drop', Telugu *pisara* 'a bit', Malayalam *pīcca* 'what is small', Kan *pīcu* 'shortness, smallness' (DED 4132).

M *bicixan* 'small, tiny'.

J *bisai* 'very small'.

Q *pisi* 'few, a little, cosa pequeña, corta, breve'.

Note the pair F *pihi* 'stingy, miserly', F *pihistäjä*, *pihtari* 'miser, niggard' and Tam *picināri* 'miser', *picini* 'niggard'. Note also PFP \**pisa-* (*piśa-*) 'tropfen' (Rédei et al 1987).

254. Proto-DURALJAN \**pitā-* 'to hold, to keep', (Sw 74 'to hold').

F *pitää* 'to hold, to keep, to retain, to squeeze etc.'.

E *pidada* 'ibid.', Mordvin *pedams* 'to grasp', H *fúz* 'to bind'.

Tam *pikai* 'to work with the thumbs and fingers in mixing, to squeeze or to mush', *picakku* 'to press between the fingers', Kan, Telugu *pisuku* 'to squeeze', Tam *piṭi* 'to catch, to grasp, to capture', Telugu *piṭi* 'handle, handful' (DED 4135, 4148).

Q *pitukuy* 'juntar las manos, juntarse a otro'.

Note PFU *\*pitā-* 'halten' (Rédei et al 1987) and Sanskrit *picc*, *piccu-* 'to press, to squeeze'.

255. Proto-DURALJAN *\*poro* 'ash, slag', (B 2, Sw 4 'ashes').

F *poro* 'ash, slag', *puru* 'dust'.

E *pori* 'mud, muck, mire', H *por* 'dust'.

Tam *puṛuṭi* 'dust, pulverized or fine powder, dry earth', *pūṛi* 'powder, dust, sacred ashes' (DED 4316)

M *bor* 'dust'.

J *boroboro* 'zerfallen'.

Q *purun* 'desierto'.

Note PFP *\*porz* 'brennen' (Rédei et al 1987).

256. Proto-DURALJAN *\*puxu-* a ) 'wehen', (Sw 16 'to blow').

F *puhua* a) 'to blow', *puhaltaa* 'to blow', *puhuri* 'gust, squall'.

E *puhuda* 'to blow', H *fúj-*, Selkup *puua-* 'to blow'.

Tam *pukai* 'smoke, vapour, steam', Malayalam *paka* 'smoke, vapour' (DED 4240).

Turkish *buhar* 'Dampf'.

J *fuku* 'to blow'.

Q *puku-* 'to blow'.

Note PU *\*pušz-,puwz-(puyz-)* 'blasen' (Rédei et al 1987).

257. Proto-DURALJAN *\*puxu-* b ) 'to speak'.

F *puhua* b) 'to speak'.

Karelian *puhuo* 'to speak'.

Tam *pukal* 'to say', *pukar* 'to praise' (DED 4233, 4235).

J *fugi* 'to discuss'.

258. Proto-DURALJAN *\*puy-* 'to deceive'.

F *puijata* 'to deceive, to lie'.

Lappish *buijat* 'ibid.'.

Tam *poy* 'to lie, to deceive, to prove false', Malayalam *poy* 'a lie' (DED 4531).

259. Proto-DURALJAN *\*puku* a) 'bladder, abscess'.

F *pukama* 'bump, abscess'.

E *pugu* 'crop'.

Kan *pugul* 'Blase' (DED 4455).

J *bukuro* 'bladder'.

Q *pukuču* 'bladder'.

260. Proto-DURALJAN \**puka-* 'to poke, to game, to camp'.

F *pukari* 'bully', *pukata* 'to poke', *pukki* 'buck'.

E *puksida* 'to poke', *pukk* 'buck', H *bōk* 'to poke'.

M *bux-a* 'bull', *buxasa-* 'to rut'.

J *buke* 'Krieger'.

Q *pukīlay* 'game', *pukara* 'castillo'.

261. Proto-DURALJAN \**puku* b) 'dress'.

F *puku* 'dress, suit, costume', *pukea* 'to dress, to clothe'.

Karelian *pugu* 'dress', H *bui* 'kriechen'.

J *fuku*, -*puku* 'dress, costume'.

Note the group 259 and PFU \**puke-* 'kriechen' (Rédei et al 1987).

262. Proto-DURALJAN \**puna* 'red', (B 64, Sw 116 'red').

F *puna* 'redness', *punainen* 'red'.

E *puna* 'redness', *punane* 'red', Mari *pun* 'hair, color of an animal', H *fan* 'hair'.

Tam, Malayalam *pūval* 'red', Tam *pukar* 'brown, tawny color', Telugu *pula* 'light tawny color' (DED 4232, 4371).

Note PFU \**puna* 'Haar' (Rédei et al 1987) and PA \**pun-*, *pün-*, *pul* 'fire, red'.

263. Proto-DURALJAN \**puŋke* 'stout' (Sw 164 'thick').

F *punkero* 'stout', *punkki* 'acarid'.

E *puuk* 'acarid'.

Tam *poŋku* 'to be swollen', Kan *poŋgu* 'to swell' (DED 4469).

Q *punki* 'swollen, to swell'.

Note PFU \**puŋka* (*poŋka*) 'Knollen, Beule' (Rédei et al 1987) and PKJ \**pukur/pókór* 'bulky' (Martin 1966).

264. Proto-DURALJAN \**pun-* 'to twist, to twine'.

F *punoa* 'to twist, to twine'.

E *pune* 'twist, twine', Mordvin *ponams* 'to twist', H *fon* 'to twist', Yurak-Samoyed *pwnom* 'to twist'.

Tam *puñai*, *piñai* 'to unite, to tie', *piŋgu* 'to braid, to knit, to weave', *pannu* 'to weave', Telugu *pena* 'a twist of ropes, tie, bond', Gondi *panti* 'bowstring' (DED 3923, 4160a, b, 4207).

J *funpun* 'verworren, kunterbunt'.

Note PU \**puni-/punā-* 'flechten' (Janhunen 1981) and PU \**puna-* 'spinnen, flechten' (Rédei et al 1987).

265. Proto-DURALJAN \**puri-* 'to move, to walk', (Sw 178 'to walk').

F *purjata, purjastaa* 'to walk here and there', *purje* 'sail'.

E *puri* 'sail', *purju* 'intoxication'.

Tam *pari*, Kan *pari* 'to move, to run' (DED 3963).

J *burabura* 'herum bummeln, faulenzeln, baumeln', *burari* 'mit Musse, ziellos', *furafura* 'mussig gehen'.

Q *puri-* 'to walk, to travel, to wander, to walk time spending'.

Note PFP \**pur3-* 'hineingehen' (Rédei et al 1987).

266. Proto-DURALJAN \**puro* 'brook'.

F *puro* 'brook', *pudas* 'Flussarm'.

Karelian *purakko* 'brook'.

Malayalam *pura*, Kan *pore* 'river' (DED 4318).

M *borgija* 'rapids in a river'.

J *furo* 'Bad, Badstube'.

Q *-para* 'in names of rivers'.

Note PU \**puḍa-se* 'Flussarm' (Rédei et al 1987).

267. Proto-DURALJAN \**purcu* 'tail' (B 82, Sw 160 'tail').

F *pursto, pyrstö* 'tail, fin'.

Karelian *pursto* 'ibid.'.

Telugu *puri* 'peacock's tail', Gondi *burā* 'feather', Konda *burus*, *puri* 'feather of a peacock, feathers' (DED 4367, 4358).

Q *puru* 'feather'.

268. Proto-DURALJAN \**putu* 'dust, flake', (Sw 34 'dust').

F *putu* 'dust'.

E *pude* 'flake, dandruff etc.'.

Tam *poti* 'dust, powder', *pūti* 'ashes, dust, powder' (DED 4316).

M *buta*, *butu* 'Staub'.

J *fuke* 'dandruff'.

Note PKJ \**pulḡye/pilḡye* 'dandruff' (Miller 1966).

269. Proto-DURALJAN \**pū* 'tree', (Sw 174 'tree').

F *puu* 'tre'.

E *puu*, Komi *pu*, H *fa*, Selkup *pō* 'tree'.

Tam *pū*, *pūvu*, *pūvatti* 'lac tree', Malayalam *pūvam* 'a fine timber tree' (DED 4348).

J *bō* 'Stab, Stock, Pfahl'.

Note PU \**puwe* 'Baum, Holz' (Rédei et al 1987).

270. Proto-DURALJAN \**pürk-* 'to strive, to try'.

F *pyrkiä* 'to strive, to try'.

E *pürgida* 'ibid.'.

Tam *puri* 'to desire', *pura-pural-ādu* 'to be eager or desirous', Kan *puri* 'strength, courage', Telugu *puri-kolupu* 'to urge, to rouse' (DED 4283).

J *bōri* 'ungebührlicher Gewinn, Schiebung'.

Note PKJ \**pōr(a)-* 'to desire' (Martin 1966).

271. Proto-DURALJAN \**pū-* 'hazelgrouse'.

F *pyy* 'hazelgrouse'.

E *pūū* 'woodgrouse', H *fogoly*, Selkup *pēke* 'ibid'.

Tam *pūr*, Telugu *pūrēḍu* 'quail' (DED 4374).

Q *pisjaka*, *pisaja* 'perdiz'.

Note PU \**piṇe* (*pūṇe*) 'Haselhuhn' (Rédei et al 1987).

272. Proto-DURALJAN \**pūt-* 'to beg, to ask, to catch, to hunt'.

F *pyytää* 'to beg, to ask, to catch, to hunt'.

E *pūūda* 'to catch, to hunt, to strive, to endeavour, to try etc.', Yurak-Samoyed *pīdē* 'to drive away'.

Kan *bēḍu* 'to beg, to pray', *bēṭe* 'hunting, chase', Tam *vēṭu* 'hunting, hunter', Kuwi *bēṭa* 'hunting' (DED 5527, 5528).

Q *patatchay* 'examinar, avisar, perdonar, ajustar, hacer justicia'.

Note the set F *pyyntō* 'request, demand, petition', Tam *vēṇṭal* 'desiring, petition', Kan *bēṇṭa* 'longings, sexual passion', and PU \**piwtā-/piwetā* 'den Spuren eines Wilden folgen' (Rédei et al 1987).

273. Proto-DURALJAN \**rayu* 'thunderstorm'.

F *raju* 'brisk', *rajuilma*, OF *raiu* 'storm'.

E *raju* 'hurricane, thunderstorm'.

J *raiu* 'thunderstorm'.

Q *ṛayo* 'lightning' (Spanish loan?).

274. Proto-DURALJAN \**raka* 'fissure, female genitals'.

F *rakas* 'dear', *rakastaa* 'to love', *rako* a) 'female genitals', b) 'cleft, fissure'.

E *ragu*, *pragu* 'cleft, fissure', H *rokon*, *rokkon* 'relative, near', Yurak-Samoyed *lak*, *rak* 'close, near'.

Kan *eraka*, *eruka* 'love, good will' (DED 862), *urugu* 'erotic sentiments', Kuwi *rāhā* 'pleasure' (DED 691, 5172).

Turkish *rahim* 'uterus', *rahne* 'Bresche, Leck, Loch'.

J *rajo* 'Akt, die nackte Frau', *rakushu* 'Schnizer'.

Q *raka* 'female genitals', *raki-* 'to separate'.

Note PFU \**rač3* 'Loch' and \**rakka* 'nahe, nahe gelegen' (Rédei et al 1987).

275. Proto-DURALJAN \**rak-* 'to build'.

F *rakentaa* 'to build'.

E *rakendada* 'to use, to apply, to harness', H *rak* 'to put, to set, to load, to do, to build'.

Q *rajai* 'casa inconclusa'.

Note the set F *raunio* 'ruin', Tam *iranku* 'to fall of a high state' (DED 516), and J *rakka* 'Fall, fallen'. Note PFU \**rakk3* 'bereiten, bauen' (Rédei et al 1987).

276. Proto-DURALJAN \**sā-* 'to come, to arrive', (B 16, Sw 23 'to come').

F *saada*, *saapua* 'to come, to arrive, to get'.

E *saada* 'to get, to become, to be able, to come', Mari *so.am* 'come, arrive'.

Kan *sār* 'to come', Tam *cār* 'to reach, to approach, to be near to', Telugu *tāru* 'to move about, to wander' (DED 2460).

M *zaila-* 'to go away'.

J *sā* 'come!', *tsuku* 'to arrive, ankommen'.

Q *čaya-* 'to arrive at'.

Note PFP, U?\* *saye-* 'kommen, ankommen' (Rédei et al 1987).

277. Proto-DURALJAN \**sarna-* 'to sermonize'.

F *saarnata* 'to sermonize, to preach, to lecture'.

E *sarnastada* 'to make similar', Hanti *sarna-* 'call up magic'.

Turkish *sarna-* 'to sing, to celebrate'.

J *sarau* 'immer wieder durchlesen'.

Q *harawi*, *jarawi* 'ballad, ceremonial song'.

Note PFU \**šarna-* 'Zaubersprach, Rede, Gespräch' (Rédei et al 1987).

278. Proto-DURALJAN \**saḏa-* 'to curse'.

F *sadatella*, *sadattaa* 'to swear, to curse'.

E *sajatada*, *saatada* 'to swear, to curse', Mari *sudala-* 'to curse'.

M *zadala-* 'to make rain with magic spells'.

J *satosu* 'ermahnen, warnen, belehren', *satori* 'perception, understanding'.

Q *sutichay* 'nombrar, llamar, dar apellido'.

279. Proto-DURALJAN \**sirw-* 'nit'.

F *saivar* 'nit'.

E *saeras*, Lappish *ciwros*, Komi *seröl* 'nit'.

Kolami *śīr*, Kuruṣ *cīr* 'nit'.

M *sirke* 'red louse', Turkish *sirkä* 'nit'.

J *shirami* 'nit'.

Q *čiya* 'nit'.

280. Proto-DURALJAN \**sākō* 'fire, firecoal', (B 27, Sw 48 'fire').

F *sākene*, *sāen* 'spark', *sākenōidā* 'to sparkle, to scintillate', *sākeä* 'to gather firecoals together for maintaining the fire'.

Telugu *tagulu* 'to strike against', *tagulokonu* 'to catch fire' (DED 3004).

M *caki-* 'Feuer schlagen', *cakilgan* 'Blitz', Old Turkish *cak* 'Feuer schlagen'.

J *takibi* 'Feuer', *taku* 'verbrennen, to kindle'.

Note PFV \**śāke* 'Zünder' (Rédei et al 1987). Note also the pair F *liekki*, E *leek* 'flame' and J *yaki* 'das Brennen'.

281. Proto-DURALJAN \**sala* 'wilderness, uncultivated region'.

F *salō* 'wilderness, uncultivated region, island'.

Karelian *salō* 'big, unhabited forest', E *salu* 'wood, groove'.

Tam *calli*, Kan *jalli* 'broken stone', Tam *caracara* 'to rough on surface', Kan *caralu* 'small rounded pebbles' (DED 2381, 2354).

M *šala* 'waterless desert country'.

J *sareki* 'Kies, Griess, Schutt', *jari* 'Kies, Schotter'.

Q *saīa* 'stone area in a field, hill consisting of gravel or loose stones that walking is difficult', *saīqa* 'puna'.

Note F *sora* 'Kies, Schotter, Kiessand', and as possible abstractions F *sala* 'secret, hidden', Mordvin *sala-* 'to steal, to rob', J *sarau* 'entführen, rauben', *zarazara* 'rauh, rissig', and Q *salla* b) 'liviano, deshonesto'.

Note PU \**sālā* 'Geheimnis' (Janhunen 1981), and PU \**sala-* 'stehlen, Dieb' (Rédei et al 1987).

282. Proto-DURALJAN \**salpa-* 'to cut, to castrate', (Sw 25 'to cut').

F *salvaa* a) 'to cut up the framework of a new loghouse', *salvos* 'timbering', *salvaa* b) 'to castrate'.

E *salv* 'frame, bin', *salvata* 'to prick, to stick, to sting'.

M *salbara-* 'to claw or paw, to split', *salbal(a)-* 'to split, to divide into splinters, tear off pieces of wood'.

Q *kaļpičay* 'to notch, to groove, to crack or tear a piece from', *qaļpa-* 'to gnaw, to wear away'.

Note the group 303 and following words with word-initial /k/ F *kalpa* 'sword', *kalpei* 'a castrated male calf', and *kalvaa* 'to gnaw, to wear away', PFU \* *śale-* 'schneiden, spalten' (Rédei et al 1987), and PKJ \*čal 'to cut off' (Martin 1966).

283. Proto-DURALJAN \**sama* 'same'.

F *sama* 'same'.

E *sama* 'same'.

Kan *sama* 'same, equal' (Bhat 1971).

J *samazama* 'allerlei'.

Note Nostratic connections.

284. Proto-DURALJAN \**sampa* 'frog, toad'.

F *sammakko* 'frog, toad'.

Vepsic *samba* 'frog, toad'.

Tam *yāmai*, *āmai*, Telugu *tāmēlu*, Gonda *samel*, *hamul*, Kui *sēmbi* 'tortoise' (DED 5155).

J *kame* 'Schildkröte'.

Q *hampatu* 'toad', *jampatu* 'sapo, tortuga'.

Note the similarity between J *kame* and F *konna* 'toad', (F *kilpikonna* 'turtle, tortoise').

285. Proto-DURALJAN \**samo-* 'to wander, to go' (B 32 'to go').

F *samota* 'to stroll, to wander, to travel (far and wide)'.

E *sammuda* 'to step, to jump, to go', Mansi *sūm*, *šūm*, *šōm-* 'to gallop, to run'.

M *jabu-* 'to go, to walk, to go away'.

J *samayou* 'umherwandern, umherirren'.

Q *hamu-* 'to come', *jamuy* 'venir'.

286. Proto-DURALJAN \**sam-* 'to go out, to die down'.

F *sammua* 'to go out, to die down, to loose consciousness'.

Karelian *sammuo* 'to go out, to die down'.

Tam *cāmpu* 'to wither, to perish, to pine away, to decline, to loose consciousness',  
*camai* 'to be destroyed, to finish, to kill' (DED 2453).

J *sameru* 'kalt werden, abkühlen, verblassen, verbleichen'.

Q *sama-* 'to rest, to stop, to lie fallow'.

Note PKJ \**tsxwampu-* 'cold'.

287. Proto-DURALJAN \**sampi* 'sturgeon'.

F *sampi* 'sturgeon'.

E *samb* 'sturgeon'.

Tam *campai* 'fish', Malayalam *campu* 'a fish, boat-load of fishes' (DED 2348).

J *same* 'Hai'.

Note PFU \**śampe* 'Stör' (Rédei et al 1987) and PKJ \**samb(a)* 'mackerel' (Martin 1966).

288. Proto-DURALJAN \**sana* 'mark, sign, word', (B 68, Sw 127 'to say').

F *sana* 'word, message, earmark of a reindeer', *sanoa* 'to say, to tell, to mention, to inform', *sanoma* 'message, information'.

E *sōna* 'word', *sōnada* 'to say', *sōnuda* 'to blame, to conjure'.

Kan *sanadu* 'charter, document' (Bhat 1971).

M *sana-* 'to think, to reflect', *sanamzi* 'thought, idea', Old Turkish *sana* 'to count'.

J *hanasu* 'sprechen, reden', *izanaí*, OJ *izanopu* 'to invite, to urge'.

Q *sanampa* 'señal para avisar, conocer, advertir', *sanampa-* 'to signal, to indicate'.

289. Proto-DURALJAN \**sapa* 'tail' (B 82, Sw 160 'tail').

F *saparo*, *sapa* 'tail'.

Karelian *sabaro* 'tail, penis'.

M *suul* 'tail', *cibe* 'penis'.

J *shippo* 'tail'.

Q *čupa* 'tail'.

290. Proto-DURALJAN \**sara-* 'to dawn, to shine'.

F *sarastaa* 'to dawn'.

E *sarada*, *serada*, *sirada*, *sirendada*, *sārada* 'to shine, to glimmer, to glisten, to glare'.

M *sara* 'moon', *sarayul* 'bright, slight, open'.

J *sarasu* 'bleichen, aussetzen'.

291. Proto-DURALJAN \**sata* 'much, many'.

F *sata* 'hundred'.

E *sada*, Mordvin *śada*, H *száz* 'hundred'.

M *zayu*, *zyy* 'hundred'.

J *zutto* 'viel'.

Q *sutui sutui* 'mucho, muy'.

Note PFU \**sata* 'hundert' (Rédei et al 1987) and Sanskrit *satam* 'hundred'.

292. Proto-DURALJAN \**saḍa-* 'to rain', (B 63, Sw 115 'rain').

F *sataa* 'to rain', *sade* 'rain'.

E *sadada* 'to rain'.

Tam *citari* 'to rain', Telugu *citacita* 'dampness' (DED 2524, 2525).

M *zada* 'in pieces, to pieces'.

J *zāzā* 'der Regen rauscht nieder'.

Q *sutuy* 'gotear, to drip, to fall on (of rain)'.

Note the group 278 and PU \**śāḍā-* 'regnen' (Janhunen 1981).

293. Proto-DURALJAN \**sawī* 'clay'.

F *savi* 'clay'.

E *sau*, Mordvin *sovon*, Mansi *sol*, *sōl*, Selkup *sū* \*clay'.

Tam *cavaṭu* 'fuller's earth, alkaline soil', *cavaḍi*, *cakati* 'mud, mire', Kurux *xajj* 'earth, clay' (DED 2386, 2266, 1958).

Q *siwa* 'paja esparcida y sacudida, preparación para barro'.

Note PFU \**śawe* 'Tohn, Lehm' (Rédei et al 1987).

294. Proto-DURALJAN \**sawu* 'smoke', (B 75, Sw 142 'smoke').

F *savu* 'smoke'.

E *sau* 'smoke', Mordvin *suvtams* 'to smoke, to cure'.

Kan *savusava* 'smell, fragrance' (Bhat 1971).

Q *saumay* 'echar humo'.

Note PFV \**sawe* 'Rauch'.

295. Proto-DURALJAN \**sece-* 'seven'

F *seitsemän* 'seven'.

E *seitse*, Mari *sisim*, Komi *sizim*, H *het* 'seven'

Kurux *sattē*, Malto *sāt* 'seven' (loan from Sanskrit, Menges 1964).

Old Turkish *yeti*, Chuvash *śíce*.

J *shichi* 'sieben' (Sino-Japanese).

Q *qančis* 'seven'.

296. Proto-DURALJAN \**sepi-* 'to clasp, to coin'.

F *seppä* 'smith', *sepittää* 'to mace, to fabricate, to coin, to put together, to invent, to write, to compose etc.', *sepivä* 'stem clasping', *seppel* 'wreath, garland, crown'.

E *sepp* 'smith', *seppel* 'garland', *sepitseda* 'to put together, to fit together, to find, to make in haste'.

Tam *cippam* 'parcel, bundle', *ceppu* 'to say, to speak, to tell' (DED 1955).

J *shibari* 'to bind, to tie', *sopi* 'finely, delicately'.

Q *chipa* 'atado de cualquier cosa', *chipana* 'manilla, brazaleta, pulsera', *chipay* 'armar trampas'.

Note PFU \**šepä* 'Hals, Nacken', and PFU \**šepä* 'geschickt' (Rédei et al 1988).

297. Proto-DURALJAN \**cecä* 'uncle'.

F *setä* 'uncle'.

Lappish *caecce* 'uncle', Komi *tsoz* 'uncle, maternal uncle', Mansi *säs, sässä* 'uncle', Yurak-Samoyed *čəča* 'maternal uncle'.

J *chichi* 'Vater'.

Q *chacha* 'anciano, el hermano del padre' (Middendorf 1979).

Note PU \**cecä* 'Onkel' (Janhunen 1981).

298. Proto-DURALJAN \**cera* 'friend, companion'.

F *seura* 'company, society', *serkku* 'cousin'.

E *sõber* 'friend'.

Tam *tōran* 'friend', Malayalam *tōran* 'companion' (DED 3563).

Tungusic *tūri* 'famille'.

J *tsure* 'Begleiter', *tsureko* 'Kind aus erster Ehe'.

Q *turi* 'brother, primo', *čuri* 'man's child'.

Note PKJ \**tòry-* 'accompany' (Martin 1966).

299. Proto-DURALJAN \**sīma* 'line, cord'.

F *siima* 'line, cord'.

Karelian *siima*, Vepsic *sim*, *sima* 'line, cord'.

M *seme-* 'to unravel, to separate into fibres or threads'.

J *shima* 'stripes, hairline', *shimeru* 'to bind, to tie'.

Q *simpa* 'braid'.

Note the groups 310 and 312, and Old Norwegian *simi*, *sima* 'cord, string'.

300. Proto-DURALJAN \**siðe* 'fine rain', (B 63, Sw 115 'rain').

F *siite* 'fine, partly frozen rain'.

Livonian *sīdig* 'cloudy, wet'.

Tam *citar* 'to scatter, to strew, raindrop', *citari* 'to rain' (DED 1546, 2524).

M *sigyder(i)* 'dew', *cigigle-* 'to rain, to snow'.

J *shitoshito* 'sanft, mild, feucht, wässrig', *shitataru* 'tropfen', *jitojito* 'feucht sein'.

Q *čikčī* 'sleet', *čikčī-* 'to sleet', *chiqchiy* 'garnizar'.

Note PFU \**siðē* a) 'Feuchtichkeit, nasse Stelle' (Rédei et al 1988).

301. Proto-DURALJAN \**siki-* 'to beget, to breed', (B 70, Sw 131 'seed').

F *siittää*, FD *sikittää* 'to beget, to breed', *siitos* 'breeding'.

E *sigitada* 'breeding', *sigiti* 'penis'.

Kan *cigi* 'to sprout', *sēdya* 'cultivation' (DED 2489).

M *cikile-* 'to sprout, push out new shoots, germinate', *cici* 'to poke, to strike, to begin to sprout'.

J *shiki* 'to spread'.

Q *čīta* 'to domesticate young animals', *chita* 'animalito que sigue a su dueño a quelquir parte'.

Note as possible derivatives F *sikiō* 'embryo', Q *čiku* 'to wean', *chiqchiy* 'brotar, germinar, retoñar'. Note also PFU \**siðs* b) 'Eile, Streben' (Rédei et al 1987).

302. Proto-DURALJAN \**silmu* 'closed eye', (B 24, Sw 39 'eye').

F *silmä* 'eye', *silmu* 'bud', *sil mukka* 'mesh'.

E *sil m* 'eye', *sil mus* 'mesh, loop, snare'.

Tam *imai*, *cimiṛ*, *cimiṛi* 'to wink, to make a signal with eyes', Malayalam *cimpuka*, *cimmuka* 'to twinkle with eyes', Telugu *cimuṭu* 'to wink' (DED 2545).

Q *chimi* 'labio partido', *chimlliy* 'pestañear', *čimqi-* 'to wink'.

Note PU \**šilmä* 'Auge' (Janhunen 1981, Rédei et al 1988).

303. Proto-DURALJAN \**silp-* 'to mutilate, to split', (Sw 148 'to split').

F *silpoa* 'to mutilate, to slash into pieces', *silppu* 'chaff'.

Karelian *šilbie* 'to slash, to cut', Hanti, Mansi *sil-* 'to slit, to cut, to split'.

Tam *cilu*, Kan *sīl* 'to split, to divide, to part', Parji *čilpa*, Konda *silpa* 'piece or chip of wood', Kui *silpu* 'to shave' (DED 2566).

M *silbula-* 'to tear'.

J *chirabasu* 'sich zerteilen'.

Q *čilpi-* 'to tear into small pieces'.

Note the group 282 and PFU \**sälä-* 'schneiden, spalten' (Rédei et al 1988).

304. Proto-DURALJAN \**sima* 'drinking' (B 19, Sw 31 'to drink').

F *sima* 'honey, nectar, mead', *siemaista* 'to drink'.

Karelian *sima* 'honey, nectar'.

Tam *cemmal* 'water', Telugu *cemma* 'moisture, damp', Tulu *śima* 'moistness' (DED 2539).

M *sim-e* 'nectar', *sime-* 'saugen', Tsvassi *sim* 'nectar'.

J *shimizu* 'Quellwqasser', *shimeri* 'feuchtichkeit, Feuchte', *jimejime* 'feucht, nass'.

Q *chuimiy* 'manar, rezumar aqua', *simi* a) 'bocado, bocanada'.

Note PFV \**seme* 'Trank, trinken', (Rédei et al 1988) and PKJ \**sómy* 'to soak' (Martin 1966).

305. Proto-DURALJAN \**si* 'thou', (B 86, Sw 168 'thou').

F *sinä* 'thou, you'.

E *sina*, Komi *te*, H *te* 'thou'.

Tam *nin(n)*, *un(n)* 'thou', Old Tamil *nin(n)* 'thou' (DED 3684).

M *ci-* 'thou', *cinu* 'gen. of *ci*'.

J *anata* 'thou'.

Note PU \**tun* 'du' (Janhunen 1981) and PU \**tö* 'du' (Rédei et al 1988).

306. Proto-DURALJAN \**cinti* 'small, little', (B 74, Sw 140 'small').

F *sintti* 'small, little', hintelä 'slender', *hento* 'tender, tiny'.

H *cingar* 'slender, tiny'.

Tam *cinna* 'small, little', *cinni* 'small child', Telugu, Malayalam *cinna* 'small' (DED 2594).

Q *činti* 'shrunken', *činti-* 'to shrink', *chiñi* 'pequeño'.

307. Proto-DURALJAN \**sipa* 'young girl'.

F *sipakka*, *sivakka* 'quick, swift, fast, nimble', *siveä* 'pure, clean', *sievä* 'pretty', *siippa* 'sweetheart, married woman'.

Karelian *sibic* 'quick, fast'.

Pengo *jipoli*, Manda *jipar* 'young woman, grown up girl' (DED 5167).

M *sibai* 'quick, alert'.

Q *sipas* 'joven muchacha, moza de 15-30 anos'.

Note PFU \**śiwa* 'sauber' (Rédei et al 1988).

308. Proto-DURALJAN \**sir-* 'to strew'.

F *sirottaa* 'to strew', *siru*, *sirpale* 'splinter'.

E *sirtsutada* 'to strew', Komi *tsir*, H *ciribiri* 'tiny splinter'.

Tam *ciru* 'small', *cillara* 'things scattered here and there in small quantities', Kan *sīru* 'to be scattered', Malayalam *cillara*, Telugu *cillara* 'small' (DED 1594, 2574).

M *sirbe-* 'to dust'.

J *chiri* 'dust, to be scattered'.

Note the pair F *sirkkalehti* 'seed leaf, cotyledon', M *siryul* 'to penetrate', and PFV *\*sira-hta* 'streuen' (Rédei et al 1988).

309. Proto-DURALJAN *\*sitta* 'shit, feces'.

F *sitta* 'shit, feces', *sittiäinen* 'dorbeetle'.

E *sitt* 'shit, feces', Komi *sit* 'ibid.'.

Tam *cettai* 'dry rubbish' (DED 2770).

M *cicy-a* 'diarrhea, watery feces', Old Turkish *sic* 'to defecate'.

Q *qiča* 'diarrhea'.

Note PU *\*sitta* 'Dreck, Kot, scheissen' (Rédei et al 1988).

310. Proto-DURALJAN *\*sim-* 'to scold, to accuse'.

F *soimata*, *suomia* 'to scold, to blame, to accuse'.

E *sōimata* 'to scold', Lappish *soimet* 'to accuse'.

M *zimele-* 'to scold, to accuse', *cim-e* 'sound, noise'.

J *semeru* 'tadeln, zur Verantwortung ziehen'.

Q *simpiy* 'acusar'.

311. Proto-DURALJAN *\*soke-* 'blind'.

F *sokea* 'blind', *sokaista* 'to blind', *sokko* 'blindman', *sohia* 'to poke blindly'.

E *sōge* 'blind, stupid, uncontrollable'.

Tam *cokku* 'stupor, torpor, dullness as produced by enchantment of drug', Kan *sorku*, *sokku* 'to become mad, intoxicated or infatuated, grow stupid, bewildered or confused' (DED 2853).

M *soxui* 'blind', *soxuła* 'to make blind'.

J *sokohi* 'amaurosis, cataract', *sokonau* 'schaden, verletzen, verderben'.

312. Proto-DURALJAN *\*solmu* 'knot, tie', (Sw 171 'tie').

F *solmu* 'knot, tie', *sommelo* 'a tangled knot', *sompelo* 'a bad sewer', *sommitella* 'to compose', *ommella* 'to sew, to stitch'.

E *sōlm*, Moravian *sulmo* 'knot', H *csosmó* 'knot, bunch, bundle', E *ōmmelda* 'to sew'.

M *calm-a* 'lasso, cord'.

J *tsumo* a) 'spindel', b) 'to pile up'.

Q *simpay* 'coser mal, trenzar'.

313. Proto-DURALJAN \**soma* 'pretty, nice'.

F *soma* 'pretty, nice'.

Karelian *soma* 'beautiful, pretty', *tsoma* 'beautiful, pretty, good'.

Tam *compu*, Kan, Telugu *sompu* 'beauty, grace, elegance, charm' (DED 2850).

M *šumayai* 'sharp, quick, nimble, agile'.

J *sumato* 'pretty, elegant'.

Q *sumaq* 'pretty, elegant'.

Note Sanskrit *su-mati* 'benevolence, grace'.

314. Proto-DURALJAN \**sop-* 'corner, nook, recess'.

F *soppi* 'corner, nook, recess', *suppea* 'concise, terse, reduced', *suppilo* 'funnel'.

Karelian *tsuppie* 'concise', Komi *sopyd* 'narrow, be packed', H *szupolyka* 'small, lean, thin'.

M *šobxu-* 'pointed, coneshaped', *šobtutur* 'narrow, tight, small'.

J *tsubomaru*, *tsubomeru* 'kleiner machen, to shut, to close'.

Q *čpu* 'having an opening which closes naturally'.

The descriptive character of these words is obvious.

315. Proto-DURALJAN \**sot-* 'to wage war', (Sw 47 'to fight').

F *sota* 'war', *sotia* 'to wage war, to battle, to fight'.

E *sōda* 'war', *sōdida* 'to fight'.

Tam *cati* 'to destroy, to kill', Kan *sadaku* 'to beat' (DED 2322).

M *zodu-* 'to beat, to hit', *zoduya-a(n)* 'beating, fight, battle'.

J *sōtō* 'vernichten, ausmerzen, ausrotten'.

Note PFV \**sōta*, *sōča* 'Streit, Kampf, Krieg, streiten, kämpfen' (Rédei et al 1988).

316. Proto-DURALJAN \**suka* 'bristle, seta'.

F *suka* 'bristle, seta, currycomb', *sukaista* 'to slap, to strike, to slash, to sketch'.

E *suka* 'weaver's reed, currycomb', *sugeda* 'to comb'.

J *sukite* 'hairstylist', *sukaite* 'to sketch'.

Q *čuqa-* 'to throw', *chuki a* 'lanza', *čuqi* 'whip'.

Note the group 346 and PFP \**suka* 'Spreu, Granne', and PFP \**suk3* 'Borste' (Rédei et al 1988).

317. Proto-DURALJAN \**suke-* 'furrow'.

F *sukeuma* 'trail of ski'.

E *sugeneda* 'to born'.

M *suyu* 'long and narrow depression in the terrain'.

J *sukima* 'fissure'.

Q *suka*, *chuki* 'surgo'.

318. Proto-DURALJAN \**suki* 'ski, plough'.

F *suksi* 'ski', *sukkula* 'shuttle'.

E *suusk*, *suisk*, *suus*, *suks* 'ski', Mordvin *soks*, Mansi *tout*, Tavgi *tuta* 'ski'.

Kurux *cūgnā* 'to harrow', Malto *cūge* 'to poke, to stir' (DED 2719).

J *suki* 'plough, shovel'.

Q *suki* 'sowing stick', *čučǝ* 'an instrument in weaving'.

319. Proto-DURALJAN \**sula* 'to melt, melted, easy'.

F *sulaa* 'to melt, to thaw, to become digested', *sulattaa* 'to melt, to digest', *sula* 'open water, melted, liquid, plain, free, pure, flexible, easygoing etc.', *sulatto* 'smelting furnace'.

E *sula* 'melted, pure, mild (winter) weather, thaw', Mordvin *sola-* 'to melt', H *olvad* 'to melt, mild weather, thaw'.

Tam *cullai* 'pottery's kiln, furnace', *cūlai* 'kiln, furnace', *cuľuvu* 'easy, facility, lightness', Kan *suľuvu* 'ibid', Tam *calacaľa* 'to wet' (DED 2703, 2709).

M *sula* 'loose, empty, idle, free, vacant', Old Turkish *su* 'wasser', *sulaw*, *sulak* 'a watering place for livestock', Turkish *sulauma* 'wässerig werden', *sulauma* 'giessen'.

J *surasura* 'glatt, mitt Leichtigkeit fliessend'.

Q *čulu-* 'to melt', *suľa* 'dew', *chulluy* 'derretir, disolver, remojar'.

Note PKJ \**su-* 'easy' (Martin 1966).

320. Proto-DURALJAN \**culka* 'feather', (Sw 45 'feather').

F *sulka* 'feather'.

E *sulg*, Mordvin *tolga*, H *toll*, Yurak-Samoyed *to* 'feather'.

Tam *tōkai* 'feather, tail, tail of peacock' (DED 3538).

Q *čili* 'plumage'.

Note PU \**tulka* 'Feder, Flügel' (Rédei et al 1988).

321. Proto-DURALJAN \**sul-* 'intestine', (Sw 64 'guts').

F *suoli* 'intestine'.

E *sool*, Komi *sul*, Hanti *sol* 'intestine'.

M *culu* 'viscera', Tungus *sylukta* 'viscera'.

J *chō* 'intestine'.

Q -*čuli* in *čunčuli* 'intestine'.

Note PFU \**śola* 'Darm' (Rédei et al 1988) and a Nostratic connection: Greek *kolon* 'large intestine'.

322. Proto-DURALJAN \**sone* 'sinew, tendon, artery'.

F *suoni* 'sinew, tendon, puls, artery, vein'.

E *soon* 'ibid', Mordvin *san*, H *in* 'sinew'.

M *-sun* in *suda-sun* 'Puls, Ader'.

J *tsuna* 'Leine, Schnur, Reep'.

Q *-čun-* in *čunčuli* 'intestine'.

Note PU \**sene* (*sōne*) 'Ader, Sehne' (Rédei et al 1988).

323. Proto-DURALJAN \**suru* 'broth, sap'.

F *suurus* 'thickened broth, meal', *suurimo* 'peeled grain'.

E *surmad* 'ibid.', *suurus* 'meal, breakfast', Lappish *suras* 'gruel of hulled grain', Mordvin *suro*, *sura* 'corn, grain'.

Tam, Kan *sari ri* 'paste, gum, glue', Telugu *cari*, *sari* 'starch paste', Malayalam, Gadba *sāru* 'pancake', Gondi *sāri* 'bread', Kan, Tulu *sāru* 'sap, soup, broth, Tam, Malayalam, Kan *cāru* 'sap, juice' (DED 2418, 2465, 2484).

Q *sara* 'maize, corn', *sura* 'germinating corn', *suray* 'hacer fermentar el maiz'.

Note PFV \**šure* 'Brei, Grütze, Griess, Graupe' (Rédei et al 1988).

324. Proto-DURALJAN \**sūḍa* 'heart', (B 39, Sw 70 'heart').

F *sydän* 'heart'.

E *sūda*, Komi *selem*, H *sziv* 'heart'.

Kan *ede*, *edde*, *erde* 'chest, breast, courage', Telugu *eḍa*, *eḍāḍa*, *edda* 'heart, mind, breast' (DED 827).

M *suda-* in *suda-sun* 'puls, artery'.

Q *sunqu* 'heart', *sonjo* 'corazón'.

Note J *kokoro* 'Herz, Geist, Gemüte' and PU \**siḍā* (-*m3*)/*sūḍā*(*m3*) 'Herz' (Rédei et al 1988).

325. Proto-DURALJAN \**sülki* 'saliva', (Sw 147 'spit').

F *sylki* 'spittle, saliva, sputum, drivel'.

E *sülġ* 'spit, saliva etc.', Mordvin *selge*, Mansi *sal* 'saliva'.

Tam, Telugu *collu*, Kan *jollu* 'saliva' (DED 2862).

M *sylekei* 'mucus and water flowing from the mouth', Chagatai *sülägäi* 'saliva' (Collinder 1977).

J *sake* 'Sake, Reiswein'.

Note PFU *šil'ke/šül'ke* 'Speichel' (Rédei et al 1988), PA \**sülākāj* 'Speichel' (Räsänen 1969), PKJ \**swalġye* 'liquor' (Martin 1966), and the Nostratic connections.

326. Proto-DURALJAN \**sūsi* 'charcoal', (B12, Sw 19 'to burn').

F *sysi* 'charcoal, the embers', *sytyä* 'to kindle, to flame out'.

E *sūsi*, Mari *sūj*, Mansi *sūli* 'charcoal', Yurak-Samoyed '*tuńś*' 'glowing embers'.

Tam *cuṭu* 'to be hot, to heat, to burn up, to cauterize', Kan *suḍu* (*sutt-*) 'to burn, roast, fire', Malayalam *cūṭṭu* 'torch' (DED 2654, 2659).

M *cucali* 'firebrand', *cucala-* 'to kindle, to set on fire'.

Q *chusia*, *chuchia* 'rescoldo'.

Note PU \**sūd'i* 'Kohle' (Janhunen 1981), pU \**śiḍé* (*sūḍé*) (Rédei et al 1988).

327. Proto-DURALJAN \**sūt-* 'to kindle'.

F *syteä*, *syttä* 'to push, to shove, to strike', *sytyttää* 'to light, to kindle, to fire, to burn, to ignite'.

E *sūūdata*, *sūtitada* 'to kindle, to set fire to'.

Tam *cuṭu* 'to be hot, to heat, to burn', Parji *catt* 'to roast, to set fire', Kan *suḍu* (*sutt-*) 'to burn, to fire' (DED 2654).

M *sita-* 'to burn, to catch fire'.

Q *sitay* 'arrojar, lanzar, botar', *situy* 'resplandecer'.

Note the group 326.

328. Proto-DURALJAN \**sūt-* 'to accuse'.

F *syyttää* 'to accuse'.

E *sūūtada* 'to accuse'.

Q *satai*, *chatay* 'acusar, quejarse'.

329. Proto-DURALJAN \**cewe-* 'to eat', (B 22, Sw 37 'to eat').

F *syödä*, FD *syyvvä* 'to eat'.

E *sūūa*, Mordvin *sevems*, Mansi *tīm*, *tēm* 'to eat'.

Tam *cappu* 'to masticate', *cavaṭṭu* 'to chew, to swallow down', *cavai* 'to chew, to suck mother's milk', *kappu*, *kavvu*, *kauvi* 'to gorge, to bite, eating' (DED 2334, 1222).

M *cabla-* 'to eat'.

J *taberu* 'essen'.

Q *čapča-* 'to eat' (sloppily).

Note PFV \**sewe-* 'essen' (Rédei et al 1988), PA \**zep-* and PKJ \**cab-* 'to eat' (Martin 1966).

330. Proto-DURALJAN \**tata* 'father', (B 26, Sw 46 'father').

F *taatto* 'father'.

E *taat* 'father, grandfather, old man', Mordvin *tata* 'father'.

Tam *tāttā*, Kan *tāta* 'grandfather, father' (DED 3160).

Q *tayta*, 'father, sir, gentleman', *taita* 'padre'.

Note e.g. Sanskrit *tatā* 'father' and Lallwort *tata*.

331. Proto-DURALJAN \**take*- 'to become entangled' (Sw 74 'to hold').

F *takertua* 'to become entangled'.

E *takertuda* 'to become entangled', Mansi *taxērt*- 'to fix, to fasten', Selkup *tokua*- 'to get stuck'.

Tam *takai* 'to take hold, to fasten, to bind, to stop etc.', *takku* 'lasting, to become permanent', Kan *tagar* 'to be stopped or imbedded', *takke* 'embracing', Tam *cikku*, Kan *sikku* 'to become entangled, to be caught' (DED 2498, 3000).

M *takira*- 'to become entangled'.

J *daku*, *dakiau* 'to embrace', *tsukamu* 'festhalten, fangen, fassen', *tsuka* 'haften'.

Q *takya* 'to remain on inclined surface without falling', *takiay* 'tener, ser constante, perseverante'.

Note the high-grade similarity both in sound and meaning. A primeval hunting term?

Note also PU \**takka*- 'hängen, haften, stecken, bleiben' (Rédei et al 1988) and PKJ \**toxya*- 'to grasp' (Martin 1966).

332. Proto-DURALJAN \**taki* 'coat, furcoat, jacket'.

F *takki* 'coat, jacket', *takku* 'snurl, shag, bunch'.

E *takk* 'tow'.

Tam *caṭṭai*, Malayalam *caṭṭa* 'jacket' (DED 2310).

M *daxu* 'coat with fur outside'.

Q *takui takui* 'cosas revueltas', *takuy* 'mezclar, entreverar', *čakita* 'woman's jacket' (English loan?).

333. Proto-DURALJAN \**tako*- 'to strike, to forge', (Sw 47 'to fight').

F *takoa* 'to forge, to hammer', *taistella* (\**takistella*) 'to fight'.

E *taguda* 'to forge, to hammer', H *tagad* 'to deny, to act against, to contradict'.

Malayalam *taykkuka*, *takkuka*, *taikka* 'to strike' (DED 3089).

M *tay* 'sound of striking something hard'.

J *dagegi* 'Schlag, das Schlagen, Streich', *tatakau* 'kämpfen', *tataku* 'schlagen'.

Q *taka*- 'to forge, to hammer'.

The onomatopoeitic character of these words is obvious. However, in Mongol and in Finnish there exists also an abstractive wordpair F *tahto*, OF *tagda* 'will, wish, desire' and M *tay-a* 'will, wish, pleasure'. Note PKJ \**tátáx(wa)* 'to fight' (Martin 1966).

334. Proto-DURALJAN \**tä-* 'this', (B 83, Sw 167 'this').

F *tämä* 'this'.

E *tema*, Komi *ta*, Mansi *ti* 'this', H *té* 'unstet, unsicher'.

Tam *tām*, (*tamm-*) 'they, themselves', Telugu *tāmu*, *tamaru* 'they, themselves' (DED 3162).

M *tere* 'jener, der'.

Q *čay* 'that'.

Note PU \**tä/te/ti* 'dieser' (Rédei et al 1988) and PA \**te/ti* 'that, jener' (see Rédei et al 1988).

335. Proto-DURALJAN \**tamp-* 'gut, snell, rope' (Sw 122 'rope').

F *tamppi* 'strap end', *tampsi* 'gut, snell'.

Tam, Malayalam *tumpu* 'rope, frayed ends of a gut' (DED 3333).

M *dam* 'connecting', *tama-* 'to gather or collect together', *tamu-* 'to twist or spin thread or rope'.

J *tamushi* 'Flechte'.

Q *tampa* 'tangled (of hair, thread etc.), to tangle', *tami* 'placenta'.

Note the triplet Tam *imbu* 'a halting or resting place' (DED 467), J *tamaru* 'sich sammeln', *tamari* 'Wartesaal', Q *tambu* 'resting-place', and PKJ \**tamwar* 'to shut mouth' (Martin 1966).

336. Proto-DURALJAN \**tan-* 'to bind'.

F *tanota* 'to bind fast', *tanu* 'birchbark, bind of birchbark'.

E *tanu* 'headress of married women', Yurak-Samoyed *tānō* 'braid, plait'.

Pengo *danj* 'to stick, to adhere'.

Old Turkish *tan-* 'to tie'.

Q *tantay* 'reunir, juntar'.

Note PFU \**tana* 'Birkenrinde' (Rédei et al 1988).

337. Proto-DURALJAN \**tap-* 'to kill', (B 42, Sw 82 'to kill').

F *taputtaa* 'to tap', *tapella* 'to fight', *tappaa* 'to kill'.

E *tappa* 'to kill, to slaughter', Komi *tapetni* 'to beat with fist', H *tapod* 'to step', Yurak-Samoyed *tappar-* 'to kick'.

Tam *tappu* 'to strike, to beat, to kill; to die, to perish, to destroy', *cappani* 'clasping hands' (DED 3075, 3068).

M *tab* 'to sound of hammering', *daba-* 'to violate, to break, to overcome'.

J *dabogu* 'Schlag'.

Q *tapka-* 'to cause abort'.

These words have an obvious onomatopoeitic character. Note PU *\*tappa-* 'schlagen, pochen, klopfen' (Rédei et al 1988).

338. Proto-DURALJAN *\*tark-* 'accurate, exact'.

F *tarkka* 'accurate, exact, precise, sure, sharp', *tarkkaaja* 'observer', *tarkoittaa* 'to mean, to intend, to aim, to want'.

E *targutada* 'to be overwise, to be splitting hairs'.

Tam *turuvu* 'to seek, to inquire into, to pursue', *turavu* 'spying' (DED 3347).

J *tari* 'to be competent, qualified'.

M *darxaci* 'artsman, craftman'.

Q *tari-* 'to find, to meet, to get, to acquire', *taripay* 'inquir, juzcar como juez, descubrir'.

339. Proto-DURALJAN *\*taru* 'deer, elk'.

F *tarvas* 'deer, elk'.

E *tarvas* 'urus'.

Tam *u<sub>1</sub>rai*, Kan *erale*, Tulu *erafe* 'deer' (DED 476, 694).

M *zari* 'steppe deer'.

Q *taruka* 'a kind of deer, Hippocamelus antisensis'.

Note Latin *taurus* 'bull, ox'.

340. Proto-DURALJAN *\*tasa-* 'even, plane'.

F *taso* 'plane, level', *tasainen* 'even, equally', *tasanko* 'plateau', *taho* 'direction, quarter, surface'.

E *tasa* 'quietly, slowly', *tasan* 'even, plane'.

M *tasiyu* 'side, mountain slope'.

J *tahata* 'Feld', *tahen* 'vielseitig', *tahō* 'andererseits'.

Note PKJ *\*tòsg-* 'to polish it' (Martin 1966).

341. Proto-DURALJAN *\*tawti/taxuti* 'disease, malady, epidemic'.

F *tauti* 'disease, sickness, illness, malady'.

Karelian *tauti* 'ibid.'.

Tam *tavaru* 'to die', *tavvu* 'to lessen, to decrease, to shrink', *tāvu* 'to perish, to decay' (DED 3068).

M *taxul* 'mass disease, epidemic'.

J *tsutsuga* 'illness'.

Q *taqwi* 'disorder', *tiwti* 'skinny, to be destitute, live with continuous disease etc.'.

Note Swedish *död* 'death' and other Nostratic connections.

342. Proto-DURALJAN \*teke- 'to do, to make'.

F *tehdā* 'to do, to make, to act etc.', *teko* 'act, deed, doing, work'.

E *teha* 'to do, to castrate etc.', H *tesz* 'to do, to make etc.'.

M *tege-* 'to do so', *tegy-* 'to select, to pick up'.

J *deki* 'Arbeit, Fertigstellung'.

Q *teqway* 'to shell, to husk' (Middendorf 1970).

Note PFU \*teke- 'tun, machen' (Rédei et al 1988) and PKJ \*còxòr 'to make' (Martin 1966).

343. Proto-DURALJAN \*tici 'female breast, nipple', (B 11 'breast, teat').

F *tissi* 'female breast, teat'.

E *tiss* 'ibid', Mari *tsizi*, H *csecs* 'mamma, nipple'.

Kan *tāci*, *cāci* 'a childish word for female breast' (DED 2436).

M *tezijelten* 'mammals', *tezije-* 'to feed'.

J *chichi* 'to suck, breast'.

Q *čiči* 'female breast'.

Note the similar imitation of sucking and PKJ \*cyic(yi) 'breasts' (Martin 1966).

344. Proto-DURALJAN \*toka- 'to blame'.

F *tokaista* 'to snap out, to break, to blame, to say without thinking', *tokero*, *tokoi* 'stupid'.

E *togida* 'to beat, to batter', *togu* 'stupid', Mordvin *tokams* 'to fit'.

J *togame* 'tadeln, to blame'.

Q *tuksi-* 'to stick, to point at', *tuqsiy* 'punzar, señalar con el dedo, tantear con palo el ciego'.

345. Proto-DURALJAN \*totu- 'truth, verity'.

F *totuus* 'truth, verity', *todeta* 'to verify, to prove, to confirm', *tosī* 'truth, verity'.

E *tōsi* 'truth, verity, true', Komi *tod-* 'to know', Yenisey-Samoyed *tudda* 'to experience, to solve by divination'.

Tam *toṭu* 'to touch, to feel', *tēṭu* 'to seek, to search to', Kan *tēta*, *tēte* 'clearness, purity', Tulu *tētu* 'pure, clear' (DED 3480, 3456).

M *todu-* 'clear, evident, manifest', *todud-* 'to become clear or obvious'.

J *todoke* 'Anzeige, Meldung', *todokere* 'melden, anzeigen', *todashii* 'recht, richtig'.

346. Proto-DURALJAN \*tuka a) 'hair (of the head)', (B 35, Sw 65 'hair').

F *tukka* 'hair'.

E *tukk* 'hair'.

Tam *tuku* (*tukk*) 'to be gathered in a mass as the hair' (DED 3476).

Old Turkish *tū*: 'the hair of body'.

Q *čukča* 'hair'.

Note the group 316.

347. Proto-DURALJAN *\*tuka* b) 'flock, heard', (B 1, Sw 1 'all').

F *tukku* 'bunch, bundle', *tukkukauppa* 'wholesale', *tokka* 'flock, heard'.

Vepsic *tuk*, *tukuine* 'bunch, bundle', H *tóke* 'capital'.

Tam *tokai* 'flock, heard', *toku* 'to assemble, to collect', Malayalam *tuka* 'sum, whole amount' (DED 3476).

M *toy-a(n)* 'number, figure, amount', *tyg* 'an innumerable quantity', *tygemel* 'all, full, entire', Turkish *tugay* 'prigade'.

J *taka* 'Menge, Quantität'.

Q *tukuy* 'whole, entire, all'.

348. Proto-DURALJAN *\*tuli* 'fire', (B 27, Sw 48 'fire').

F *tuli* 'fire'.

E *tuli*, Mordvin *tol*, Mari *tul* 'fire', H *gyullad* 'to flame, to kindle', Selkup *tūū* 'fire'.

Tam *tulañku* 'to shine', *tī* 'fire, lamp', *ulai* 'fireplace, furnace', Tulu *tū*, *sū* 'fire, fierce', Gabda *tuy-* 'to set fire' (DED 3359, 3260, 3371).

M *tyle* 'flame, combustile, fuel', *tyle-* 'to kindle a fire', *tyli-* 'to burn, to heat'.

Q *tuīpa* 'fireplace, grill'.

Note PU *\*tulj* 'Feuer (Janhunen 1981), PU *\*tule* 'Feuer' (Rédei et al 1988), and PKJ *\*(a-)tò-* 'hot' (Martin 1966).

349. Proto-DURALJAN *\*tunke-* 'to push', (B 62, Sw 114 'to push').

F *tunkea* 'to push, to penetrate, to force'.

E *tungida* 'ibid.', Mordvin *tongo-* 'to slip, to stick', H *dug* 'to push, to penetrate'.

Tam *tāñku* 'to hit against, to strike', Kan *tāngu* 'to hit, to strike or to dash against' (DED 3150).

Q *tanjay*, *tankay* 'empujar'.

Note PFU *\*tunke* 'drängen, dringen etc.' (Rédei et al 1988).

350. Proto-DURALJAN *\*tunte-* 'to feel, to know etc. (B 43, Sw 83 'to know').

F *tuntea* 'to feel, to know, to be acquainted with etc', *tuntua* 'to feel, to be felt', *tunto* 'feeling, touch'.

E *tunda* 'to feel etc', H *tudni* 'to know, to can', Yurak-Samoyed *tumtā* 'to feel'.

Tam *tīñtu* 'to touch, to feel', Telugu *tanuku* 'to touch' (DED 3274, 3148).

M *tani-* 'to know, to be familiar with', *tanil* 'acquaintance'.

J *tannō* 'gewandt, erfahren', *tanomi* 'Vertrauen'.

Q *tanuy* 'introducir, empujar', *tanteay* 'tantear'.

Note PU *\*tumti-* 'fühlen, kennen, wissen' (Janhunen 1981), PU *\*tumte-* 'fühlen anrühren, tasten' (Rédei et al 1988), the pair F *tottua*, Ma *daduya-* 'to familiarize with, to train in', and the Nostratic connection between F *tuntea* and Spanish *tantear*.

351. Proto-DURALJAN *\*tura* 'clay'.

F *tura* 'marshy, watery earth'.

H *gyúr* 'knead'.

Tam *turu* 'rust, flaw', Konḡa *tōri*, *toriy*, *torī* 'earth, soil, clay' (DED 3343).

M *doro* 'Staub'.

J *doro* 'Schmutz, Dreck, Schlamm', *dorodoro* 'breiig, schlammig, kleisterig'.

Q *turu* 'barro'.

Note PKJ *\*ter(e)* 'muddy' (Martin 1966).

352. Proto-DURALJAN *\*turki* 'fur, coat, pelt', (B 72, Sw 137 'skin').

F *turkki* 'fur, coat, pelt, furcoat'.

Votic *turkki* 'ibid.', H *szőr* 'hair, shag', *szörme* 'furs, pelts'.

Kuṛux *tuṛuxnā*, *tuṛxa'ana* 'to take the skin off', Tam, Malayalam *uri* 'skin, peel' (DED 3358, 652).

M *turasx-a* 'skin of a dead animal'.

353. Proto-DURALJAN *\*uxk-* a) 'hole, ice hole' (Sw 28 'to dig').

F *uhku* a) 'hole, ice hole'.

E *uhk* 'ice hole', Mansi *ās* 'hole', H *ás* 'to dig' (DED 341).

Tam *akaṛ*, Kan *agaṛ* 'to excavate, to dig'.

M *uxu-* 'to excavate'.

J *ugatsu* 'bohren, graben'.

Q *uĉku* a) 'hole, grave', *uksiy* 'to make hole in the ground'.

354. Proto-DURALJAN *\*uxk-* b) 'to seep, to leak', (B 94, Sw 183 'wet').

F *uhkua* 'to seep, to leap, to brim', *uhkuinen* 'wet'.

Votic *uhkua* 'to wet'.

H *áz* 'to get moist'.

Konḡa *ud-*, *ūt-* 'to become wet'.

Q *uqu* 'wet, swamp'.

355. Proto-DURALJAN \**uyi-* 'to swim', ( B 8, Sw 159 'to swim', Sw 51 'to float').

F *uida* 'to swim', *uittaa* 'to float'.

E *ujuda* 'to swim', Mordvin *ujems*, Mansi *ujam*, *vujam*, H *úszni*, Yurak-Samoyed *ŭrnak* 'to swim'.

Kurux *ŭgyas*, Malto *óge* 'to swim, to float' (DED 1031).

M *ojimu-*, Tungus *uju-* 'to swim'.

J *uki* 'Regenzeit, Schwimmer', *oyogu* 'schwimmen'.

Note PU \**uxj-* (*uxjj-/ujj-*) 'schwimmen' (Janhunen 1981) and PU \**uje-/oje-* 'schwimmen' (Redei et al 1989).

356. Proto-DURALJAN \**ukko* 'old man, grandfather'.

F *ukko*, *ukki* 'old man, grandfather, maternal grandfather'.

E *ukk* 'old man' (loan of Finnish?), H *agg* 'old man, very old'.

Parji *akka* mother's father, Gondi *ukko* 'maternal grandfather' (DED 24).

M *ax-a* 'älterer Bruder, Onkel'

Q *awki* 'old man', *auki* 'noble, senor', *aukilla* 'abuelo, grandfather'.

357. Proto-DURALJAN \**uks-* 'in, inside'.

F *uukku*, *uuttu* 'bird's nesthole', *uksi* 'door', *utsia*, *udella* 'to be inquisitive or curious (about sb's private matter)', *ystävä* 'friend'.

E *uks* 'door'.

Tam *akam* 'inside, house, place, breast, mind' (DED 7).

M *uxa-* 'to understand, *uxayan* 'intelligent, mind'.

J *oku*, *uchi* 'das Innere, Innenseite'.

Q *uku* 'interior, inside'.

Note PFP \**ukse* 'Tür' (Redei et al 1988).

358. Proto-DURALJAN \**uli-* 'to howl'.

F *ulvoa*, *ulista* 'to howl'.

E *uluda* 'to howl, to cry'.

Tam *ŭlai* 'cry of person in anguish, howl of dog or jackal'. Tam *oli* 'to sound, sound', *ōl* 'sound', *ālu* 'to sound', Kan *uli*, *ulivu* 'to sound, to cry, to utter', to speak' (DED 760, 996, 386).

M *uli-* 'to howl'.

Q *aīwa-* 'to howl, to cry, to wail, to moan'.

These onomatopoeic words are phonetically quite similar. Note the set 378 and PKJ \**ol-* 'to sound' (Martin 1966).

359. Proto-DURALJAN \**umpu* 'bud'.

F *umpu* 'bud'.

E *umbes*, *umbne* 'closed, shut', H *bimbó* 'bud'.

Tam *arumpu* 'bud, to bud, to sprout' (DED 224).

Q *umpa* 'bud'.

Note PFP \**umpe* 'geschlossen, verschlossen' (Redei et al 1988).

360. Proto-DURALJAN \**uni* 'sleep', (B 73, Sw 139 'to sleep').

F *uni* 'sleep, dream', *uinua* 'to sleep, to slumber'.

E *uni* 'sleep, dream', *unelda* 'to dream', *pōōnada* 'to be in deep sleep', Mordvin *on* 'sleep', H *un* 'to be very bored of'.

Tam *tuñcu*, Kan *sundu*, Gonda *sunj-*, *hunj-*, *unj-* 'to sleep' (DED 3291).

M *umta-*, *unta-* 'to sleep'.

J *umi* 'to be tired'.

Q *puñu-* 'to sleep'.

Note PFP \**une* 'Schlaf, Traum' (Redei et al 1988).

361. Proto-DURALJAN \**wune-* 'to forget'.

F *unohtaa*, *unhottaa*, *uneutaa* 'to forget'.

E *unustada* 'to forget', Komi *vunnī*, Tavgi *nanāhta-* 'to forget'.

Turkish *unut*, Old Turkish *unit*, M *umarta-* 'to forget'.

Q *qunqa-* 'to forget'.

Note PU \**wun3-* 'vergessen werden' (Redei et al 1988).

362. Proto-DURALJAN \**upo-* 'to sink'.

F *upota* 'to sink'.

E *uppuda* 'to sink, to drown'.

Kan *ubiku* 'to swell, to rise, to overflow'.

J *oboreru* 'ertrinken', *abiru* 'to bath'.

Q *upaka-* 'to wash one's face'.

363. Proto-DURALJAN \**ura* 'groove (of a snake)'.

F *ura* 'groove, furrow, passage, channel, way, career', *uurre* 'groove'.

E *urg* 'groove, cavity, recess, pit, hole', *uure* 'groove', Hanti *ur* 'ancient river bed'.

Tam *uru* 'to plough, to dig up', *ūr* 'to crawl as a snake', Malayalam *ūran* 'snake', Kan *uru* 'the chain viper, carpet snake' (DED 688).

J *uro* 'Höhle, Loch, Grotte', *uroko* 'Schuppe', *uouro*, *urotsuku* 'herumlungern, umherstreifen'.

Q *uru* 'worm, bug, serpiente'.

Note PFV *\*ura* 'Weg, Pfad' (Redei et al 1988) and A *worm*.

364. Proto-DURALJAN *\*ura-* 'to do work'.

F *urakka* 'task, job contract', *uurastaa* 'to be busy', *yrittää* 'to attempt, to effort, to try etc.'.

Karelian *urakka* 'task, job, contract'.

Kan *ūrīga*, *ūrāga* 'work, business, service', Malayalam *ūrān* 'servant of kings' (DED 758).

M *ūran* 'artist, craftman, craft', *uratai* 'having skill'.

Q *uriay* 'trabajar, sober todo, tocar, palpar'.

Note the set 365.

365. Proto-DURALJAN *\*uro* 'man, male, hero', (B 49, Sw 94 'man').

F *uros* 'male', *urho* 'hero', *yrkä*, *ylkä* 'fiance', *ori* 'stallion'.

Karelian *urhakka*, *urhaz* 'courageous, brave', H *úr*, *ura-* 'lord, husband'.

Tam *ura* 'to become firm', Kan *urku* 'pover', *orba*, *orva* 'one man', Telugu *uriya* 'a brave man' (DED 649).

M *er-e*, *ori* 'man, male', Old Turkish *uri* 'male'.

J *yarō* 'male'.

Q *urqu* a) 'male'.

Note PFU *\*urs* 'Mann, Männchen' (Redei et al 1988) and PKJ *\*ora* 'parent' (Martin 1966).

366. Proto-DURALJAN *\*uta-* 'to sound, to lament', (Sw 135 'to sing').

F *utakka*, *ötäkkä* 'row, riot, noise'.

E *üttelema*, *öelda* 'to say'.

Tam *atali*, Kan *atala*, *attala* 'noise, tumult' (DED 135).

Old Türkish *öt-* 'to sing'.

J *uta* 'Lied, Ballade', *utai* 'Rezitation des No-Dramas'.

Q *uti-* 'to ache from strain'.

Note F *itkeä* 'to cry, to sing lamentation'.

367. Proto-DURALJAN *\*utu-* a) 'thin, tiny', (B 84, Sw 165 'thin').

F *utu* 'haze, mist', *utuinen*, *utu-* 'thin, vague, vaporous, hazy', *ohut* 'thin, slender'.

E *udu* 'haze, mist', *ude* 'tiny hair, downy feather etc.'

J *usui* 'thin'.

Q *učuy* 'small, little'.

Note the group 368.

368. Proto-DURALJAN \**utu-* b) 'tiny insect', (B 48, Sw 93 'louse').

F *utukka*, *ötökkä* 'thin and tiny insect', *itikka* 'gnat'.

E *üsa*, Udmurt *ici*, Mansi *is* 'little'.

Tam *acal* 'mosquito' (DED 40).

M *odui* 'dwarf, pygmy'.

Q *ita* 'chicken louse', *usa* 'louse'.

369. Proto-DURALJAN \**wāra* 'hill, mountain', (B 53, Sw 98 'mountain').

F *vaara* a) 'hill, mountain', b) 'danger, peril', *varustaa* 'to equip, to provide, to fortify', *varustus* 'armament, fortification', *vare* 'pile of stones', *vara*, *varat* 'reserve, means etc'.

E *vare* 'pile of stones, stone ruin', H *vár* 'castle', *város* 'stone ruin'.

Tam *varai* 'mountain, peak, slope of a hill', *vāram* 'mountain slope', *pārai* 'rock, stratum', *paṛampu* 'hill, mountain', *paṛam* 'armour for the body', Kan *vāra* 'declivity, sloping side' (DED 5274, 5366, 4026, 4121).

Turkish *varos* 'Vorstadt' (loan from Hungarian?).

Q *waru* 'rockpile, monton de piedras', *waruy* 'amontonar piedras en la chakra'.

Note PKJ \**moryo* 'mountain' (Martin 1966), OJ *wori* 'mountain, ridge' and G *Burg* 'castle'.

370. Proto-DURALJAN \**wārä* 'wrong', (Sw 7 'bad').

F *väärä* 'wrong, incorrect, croaked, false, faulty'.

E *väär* 'wrong, incorrect'.

Tam *vaṛu* 'error, mistake, fault, sin' (DED 5294).

M *buruyu* 'error, misconception, mistake'.

J *warui* 'schlecht, übel, schlimm, unrecht, böse'.

Q *waricha* 'prostituta', *wari* 'dañino, primitivo'.

Note A *wrong* etc.

371. Proto-DURALJAN \**wāt-* 'to demand'.

F *vaatia* 'to demand, to claim, to ask, to challenge', *vaade* 'claim'.

E *vada* 'to prattle, to chat', H *vágy* 'desire, wish, crave, covet', *vádol* 'to prosecute, to accuse'.

Kan *vāda* 'seaking, debate, dispute, controverse', *vādi'an* 'accuser', Telugu *vācu* 'to feel a strong desire for anything' (DED 5257).

Turkish *vadetmek* 'Versprechen'.

J *uttaeru* 'to accuse, anklagen'.

Q *watuy* 'to divine, conjeturar'.

372. Proto-DURALJAN \**wai-* 'fertile woman, wife', (Sw 190 'wife').

F *vaimo* 'wife'.

E *vaim* 'soul', Mordvin *vajmā* 'breath'.

Pengo *vāni* 'wife', Malayalam *vaṇṇa* 'a woman recently delivered' (DED 5348, 5347).

Q *warmi* 'wife'.

Note PFV \**vajm3* 'Herz' (Rédei et al 1988).

373. Proto-DURALJAN \**waina-* 'dead, late; to die', (B 17, Sw 27 'to die').

F *vainaja* 'dead, late', *vaino* 'persecution, war', *vainota* 'to persecute, to oppress'.

E *vaen* 'hate, persecution', ED *vainu* 'death'.

Tam *māy*, *māntu* 'to die' (DED 4814).

Q *wañu-* 'to die', *wañuč-* 'to kill'.

Note PU \**wājni-* 'Atem' (Janhunen 1981), PU \**wajŋé* 'Seele, Atem' (Redei et al 1989).

374. Proto-DURALJAN \**waka a)* 'serious mind'.

F *vakaa* 'firm, steadfast, serious, serious mind', *vakava* 'firm, fixed, secure, dignified, serious', *vaka* 'epiteth of Kalevala's Väinämöinen, old and steadfast'.

E *vaga*, *vagav* 'religious, believing, serious, steadfast'. H *komoly* 'serious'.

Tam *vakai* 'to consider, to weigh', Telugu *vagacu* 'to think, ponder, grieve, sorrow', *vaga* 'grief, sorrow' (DED 5205).

Turkish *vakia* 'die norgefallene Tatsache', *vakur* 'ernst, würdevoll'.

J *wakaru* 'verstehen, auffassen, begreifen', *wakari* 'Verständnis', *wake* 'Grund, Ursache, Bedeutung, Sinn, Sache'.

Q *waka* 'sacred thing or place; entierro de gentiles, toda clase de idolos, santuarios, cosas extrañas reverenciadas por los indigenas.

Note the group 375.

375. Proto-DURALJAN \**waka- b)* 'to warrant'.

F *vakuuittaa* 'to declare, to warrant, to secure, to insure', OF *vakittaa* 'to advice, to counsel (protecting).

E *vagustada* 'to calm, to pacify', Lappish *vākōtit* 'to urge'.

Kan *vāk* 'speech', *vākya* 'speech, sentence, aforism'.

J *ukeau* 'to warrant, to insure'.

Q *waqa-* 'to cry, to play, to make music', *waqayčai-* 'to guard, to keep', *wakiay* 'llamar

para que uno venga, llamar con nombres malos'.

Note the group 374.

376. Proto-DURALJAN \**wala-* 'to cast'.

F *valaa* 'to cast', *valu* 'casting, cast'.

E *valada* 'to cast', Mordvin *valoms* 'to cast'.

Tam *pāḷam* 'metal cast in moulds', Malayalam *vāḷam* 'bar of gold and iron', Kan *pāḷa* 'ingot of gold or silver', Malayalam *vāḷuka* 'to run, to drip' (DED 4114, 5367).

M *bolud* 'steel', *balta* 'axe'.

Q *wallja*, *walka* 'cadena', *paḷa* 'fabric decoration'.

Note PFV \**wala-* 'giessen' (Rédei et al 1988) and Nostratic connections, e.g. A *bar*.

377. Proto-DURALJAN \**wale-* 'to lie', (Sw 89 'to lie').

F *vale* 'lie', *valehdella*, *valhetella* 'to lie'.

E *vale* 'lie', *valetada*, *valetella* 'to lie'.

Tam *vaḷuvaḷu* 'to be slimy, slippery or uncertain in language' (DED 5310).

Turkish *yalan* 'Lüge'.

J *itsuwaru* 'lügen'.

Q *uliy* 'mentir'.

378. Proto-DURALJAN \**wali-* 'to complain'.

F *valittaa* 'to complain, to lament, to appeal'.

Lappish *vällōt* 'to complain'.

Tam *vali* 'pain, ache, to say' (DED 5281).

M *uli-* 'to howl'.

Note the set 358.

379. Proto-DURALJAN \**walke* 'white', (B 96, Sw 187 'white').

F *valkea* 'white, light, fire', *valo* 'light', *palaa* 'to burn'.

E *valge* 'white, light', Mordvin *valda* 'bright, light'.

Tam *vāl* 'whiteness, purity, goodness', *vāl* 'lustre', *vāl* 'white, pure, shining', Malayalam *vāl* 'purity', *velī*, *velīvu* 'light', Kan *bēla*, *bīla*, *bīlu*, *bīlī* 'whiteness, brightness', Kuṛux *bālkā*, *bālkó*, Malto *bālkō* 'yellow' (DED 5364, 5377, 4102).

M *bulay* 'partly white'.

J *aka* 'Rot'.

Note PFV, PFU? \**walkə* 'weiss, hell, leuchtend' (Rédei et al 1988), PKJ \**párk* 'bright' and PKJ \**válk(a)* 'red' (Martin 1966).

380. Proto-DURALJAN \**walta* 'pover'.

F *valta* 'pover, might, mastery', *vallata* 'to conquer'.

E *vald* 'commune, mastery', *vallata* 'to rule'.

Tam *val* 'strong, forceful', *vallam*, *vallamai* 'strenght', *valitu* 'that which is strong', Telugu *valanu* 'skill, excellence', *valamu* 'largeness', Tam *vel* 'to conquer' (DED 5276).

M *buli*- 'to overcome, to conquer', *ulus* 'people, nation, state'.

381. Proto-DURALJAN \**wara* 'coming, future'.

F *varhain*, *varahin* 'early, at early hour'.

E *varane*, *varajane* 'ibid.', *varahommik* 'early in the morning'.

Tam *varu* 'to come, to happen', *varattu*, *varuttu* 'coming in', Malayalam *varuka*, *varika* 'to come, arrive', *varavu* 'coming' (DED 5270).

Q *wara*, *warai*, 'mañana, mañana por le mañana', *waray*, *waran waran* 'cada dia'.

382. Proto-DURALJAN \**wara*- 'to draw with a special instrument'.

F *varata* 'to draw with *vara* while timbering'.

E *varada* 'ibid.'.

Tam *vari* 'to write, paint, line', Malayalam *vara* 'line streak, furrow', Telugu *varuju* 'to draw a line with a sharp instrument' (DED 5263).

J *wariin* 'der Stämpelabdruck auf zwei Ränder', *warifu* 'Kerbholz'.

383. Proto-DURALJAN \**waci*- 'arrow'.

F *vasama* 'arrow, bolt, dart'.

Karelian *vasama* 'ibid.'.

Tam *vaci* 'pointed stake, Kolami *vac* 'pointed stick', Kan *basadu* 'that which is pointed, sharp' (DED 5552).

Q *wač* 'arrow, spear'.

384. Proto-DURALJAN \**wasta* 'just, newly, recently', (B 57, Sw 104 'new').

F *vasta* 'just, newly, recently', *vasa* 'fawn', *vasikka* 'calf'.

E *vast* 'just, newly, perhaps', *vastu* 'against', Mordvin *vastoms* 'to meet'.

Tam *pacumai* 'newness, youth' (DED 3821).

J *waka*, *wakai* 'jung'.

Q *wacha* 'hijo', *wachay* 'parir'.

385. Proto-DURALJAN \**wäsä*- 'to become tired'.

F *väsyä* 'to become tired', *vähän* 'a little, little bit', *vähä vähältä* 'little by little'.

E *väsida* 'to become tired', *vähe* 'a little, little bit'.

Kan *baccu*, Kui *vaha*, Kuwi *wahinai* 'to be tired', Tam *vēcaru* 'to be weary, fatigued' (DED 5215).

J *wazuga* 'wenig', *wazawai* 'Unheil', *wazurawas* 'quälen'.

Q *waki* 'part, traction, small amount', *waki-wakiānta* 'little by little'.

Note PFP \**wāšā* 'klein', *wāšā* 'müde, krank, müde, krank werden' (Rédei et al 1988).

386. Proto-DURALJAN \**wato* 'angling line, cord'.

F *vato* 'angling line, cord', *vitōa* 'to withe', *vitša* 'twig, switch, withe'.

Lappish *vaddo* 'angling line', E *vits* 'twig, switch', Mari *bat* 'angling line, cord'.

Tam *vaṭam* 'cable, cord', *vaṭi* 'rope', Telugu *vaṭi*, Kan *vaṭa*, *vaṭara*, *vaṭi* 'string, rope, to tie' (DED 5220).

J *wata* a) 'Watte, Baumwollbaum'.

Q *watu* 'strig, cord, thread, belt', *wata* a) 'to tie', *waska* 'rope'.

Note PFV \**wata* 'Angelschnur' (Rédei et al 1988)

387. Proto-DURALJAN \**waca* 'stomach, belly', (B 3, Sw 10 'belly').

F *vatsa* 'stomach, belly'.

E *vats*, Mansi *vas* 'stomach, belly'.

Malayalam *vattī* 'belly', Kan *battī* 'big intestine', Kodagu *battī* 'stomach', Tam *vayin*, Kan *basar(u)* 'belly, abdomen', Konda *vaski*, Kui *vahi* 'intestines, bowels', Kuwi *wahi* 'stomach' (DED 3893, 5259).

J -*wata* (in *harawata*) b) 'Gedärme'.

Q *wiksa* 'stomach, belly'.

Note PFU \**waća* 'Magen' (Rédei et al 1988).

388. Proto-DURALJAN \**watu-* 'to chatter, to be harping'.

F *vatustaa*, *vatvoa* 'to be harping, to chatter'.

E *vada* 'to chat, to prattle'.

Tam *vataru* 'to chatter, to be talkative', Telugu *vadaru* 'to chatter, to prattle' (DED 5244).

Q *watučī* 'riddle, tale'.

Note the group 386 and PFP, PFU? \**wačs* (*wašs*) 'Verstand, Gedächtnis' (Rédei et al 1988).

389. Proto-DURALJAN \**weli* 'brother'.

F *veli*, *veikko* 'brother'.

E *veli*, *vennas* 'brother'.

Malayalam *vēṇṭuka* 'friendship', Tam *vēl* 'to desire, to love' (DED 5528).

Q *huauke* 'el hermano del hombre', *wauje* 'hermano', *wawqi* '(man's) brother', *walas*, *waras* 'muchacho de pocos años'.

Note PFU *\*welje* 'Bruder, Freund' (Rédei et al 1988).

390. Proto-DURALJAN *\*wene* 'boat'.

F *vene* 'boat'.

E *vene* 'boat', Mordvin *venēs* 'boat'.

Tam *puṇai* 'raft, ship', Malayalam *poṇṇu* 'float, raft, boat' (DED 4321, 4471).

J *fune* 'Schiff, Boot, Kahn'.

Note F *vanne*, Karelian *vanneh*, Vepsic *vandeh*, Komi *vudz* 'arch' PFP *\*vantse* 'arch' (Itkonen et al 1975), Tam *vañci* 'canoe', Malayalam *vallan* 'canoe', the set Tam *ampi*, Kan *ambi* 'boat, ship' and Q *wampu* 'boat, raft, float, to float', and PKJ *\*pony* 'boat' (Martin 1966).

391. Proto-DURALJAN *\*weri* 'blood', (B 9, Sw 15 'blood').

F *veri* 'blood'.

E *veri*, Komi *vir*, H *vér* 'blood'.

Tam *vaṛi*, *vār* 'to flow', Malayalam *vaṛiyuka* 'to flow' (DED 5296).

M *urus-* 'to flow, to run'.

Q *yawař* 'blood'.

Note PFU *\*wire* 'Blut' (Rédei et al 1988).

392. Proto-DURALJAN *\*wero* 'tax, part, proportion

F *vero* 'tax', *verrata* 'to compare'.

E *vōrdne* 'equal', Udmurt *vur* 'fine'.

Tam, Malayalam, Telugu *vari* 'tax', Kan *vāra* 'share' (DED 5266, 5359).

J *wari* 'Verhältnis, Proportion, Rate, Anteil', *wariateru* 'zuteilen'.

Note PFV, FU? *\*werz* 'Ort, Stelle' (Rédei et al 1988).

393. Proto-DURALJAN *\*wete* 'water', (B 92, Sw 191 'water').

F *vesi* (*vet-*) 'water'.

E *vesi*, Mordvin *ved*, Komi *va*, H *víz*, Yurak-Samoyed *bit* 'water'.

Tam *vaci* 'rain water', *vati* 'to drip, ebbs', Kan *basi* 'to drip', Malayalam *vaṭiyuka* 'to overflow', Kan *uda*, *udan* 'water', Tulu *veddè* 'wet' (DED 5212, 5221).

M *usu(n)* 'water, body of water'.

J *mizu* 'Wasser'.

Q *wisij* 'sacar agua, liquido con vaso, cucharro, balde'.

Note PU *\*weti* 'water' (Janhunen 1981), PU *\*wete* 'Wasser' (Rédei et al 1988), PKJ *\*balál* 'water' (Martin 1966) and PIE *\*wed-*.

394. Proto-DURALJAN *\*wet-* 'to pull', (Sw 113 'to pull').

F *vetää* 'to pull'.

E *vedada* 'to pull', Mordvin *vedams*, *vetams*, H *vezet* 'to carry'.

Naiki of Chanda *vet-* /*ved-* 'to pull' (DED 5551).

M *udur-* 'to pull'.

J *ude* 'Arm, Fähigkeit'.

Note PFU *\*wetä-* 'führen, leiten, ziehen' (Rédei et al 1988) and PIE *\*uedh-*, PIA *\*vadh-* 'to carry'.

395. Proto-DURALJAN *\*wēre* 'alien', (Sw 110 'other').

F *vieras* 'strange, unfamiliar, alien, quest', *vieri* 'side, border'.

E *võõras* 'strange, unfamiliar'.

Tam *vēru* 'other, enmity', *puram* 'outside, that which is foreign', Kan *pora*, *pōragu* 'outside', *porabiga* 'strange, alien', Telugu *vērú* 'different, other', *peṛa* 'foreign, other, different' (DED 5548, 4333).

J *ura* 'Rückseite', *urami* 'enmity, ill-will, resentment', *urahara* 'contrary to each other'.

Note PFV *\*wēre* 'Rand, Seite' (Rédei et al 1988).

396. Proto-DURALJAN *\*wiš-* 'five', (Sw 50 'five').

F *viisi* 'five'.

E *viis*, Komi *vit*, Mordvin *vete*, Mari *bets*, H *öt* 'five'.

Toda *üz* 'five' (DED 2826).

Turkish *bes*, Koib *pis* 'five'.

J *itsutsu*, OJ *itutu* 'five'.

Q *pičqa* 'five'.

Note a possible Nostratic connection: A *five*, G *Büschel* etc. PU *\*witi/wixti/witti* (?) 'fünf, zehn' (Janhunen 1981) and FU, ?U *\*witte* 'fünf' (Rédei et al 1988).

397. Proto-DURALJAN *\*wiā* 'corn, crop, to cultivate' (Sw 131 'seed').

F *vilja* 'grain, corn, cereals, crop', *viljellä* 'to cultivate', *viljava* 'fertile'.

E *vili* (gen. *vilja*) 'grain, corn, crop etc.', *viljakas* 'fertile'.

Tam *vilai* 'crop, yield, growth, produce', *vilar* 'fertility', Malayalam *vilā* 'vegetation, crop of corn, growing', *vilayikka* 'to cultivate', Tam *vīyam* 'seed, rice' (DED 5437).

Q *willuy* 'suavizar la tierra para sembrar, allanarla', *willina* 'lo sembrado tierno que no

cubre los terranos', *willillillyi* 'salir de la tierra poco a poco'.

Note M *ujaya* 'Lagerplatz'.

398. Proto-DURALJAN \**wiru* 'fat, grease', (B 25, Sw 42 'fat').

F *vilukala* 'fatfish', FD *viru* 'oil'.

E *Virumaa* 'the name of V. country, land of burning stone', *üdi* 'marrow of bone', Mari *bim*, Mansi *belem*, H *velõ* 'marrow of bone'.

Tam *viṛukku* 'fat', *viṛaku* 'firewood, fuel', *viṛāy* 'fuel', *iṛutu* 'butter' (DED 5299a, 5440).

M *φrdym* 'fat, obese', Turkish *bereketli* 'fat'.

J *abura* 'Fett, Tran, Öl'.

Q *wira* 'fat, grease'.

Note PFU *wiḏè* 'marrow of bone, brain' (Rédei et al 1988) and possible Nostratic connections e.g. A *fat*, *fuel*, French *huile*.

399. Proto-DURALJAN \**wirk-* 'to say', (B 68, Sw 127).

F *virikkaa* 'to utter, to say'.

Votic *verkka-* 'to say'.

Tam *vil* 'to say, to make know', *vilampu* 'to speak, to say, to proclaim openly, to make public' (DED 5411, 5430).

Q *willay* 'referir, decir, anunciar, acusar'.

Note possible Nostratic connections PIE \**weryó* 'to speak' and connection with threads and weaving: F *virkata* 'to crochet', F *virittää* 'to set a trap, to tune', Toda *wirk* 'to embroider'. About the sound, note also the pairs F *virsi* 'hymn, psalm' and Tam *virā*, *viravu* 'festival'; F *virua* 'to lie outstretched, to be bedridden, to be laid up', Tam *viṛu* 'to fall down, to fall sick'; F *virpi* 'rod, twig', Tam *viṛpu* 'twig'; F *virota* 'to revive, to recover consciousness, to rise up', Tam *viṛi* 'to open the eyes, to wake from sleep', and the groups 397 and 400. The meaning in Tam *vil*, *vilampu* is secondary. Note also PU \**wirka* 'Schlinge' (Rédei et al 1988).

400. Proto-DURALJAN \**wirca* 'urin'.

F *virtsa* 'urin'.

E *virts* 'manure water'.

Malayalam *viṛuka* 'to make water'.

401. Proto-DURALJAN \**wic-* 'to throw, to fling a weapon, to fan' (Sw 170 'to throw').

F *viskata* 'to throw, to throw out, to fan'.

E *visata* 'ibid.'.

Tam *vīcu* 'to throw, to fling (as an weapon), Kan *bīsu*, *bisuṭu* 'to throw', Malayalam *vīcuka* 'to fan' (DED 5556).

Q *wīču-* 'to throw out, to disregard, to abandon', *wischuy*, *wiqchuy* 'botar, arrojar'.

About the meaning note also the pairs F *nakata*, J *nageru* 'to throw' and F *singota*, Q *sincuy* 'arrojar' (Middendorf 1970).

402. Proto-DURALJAN \**wōri* 'mountain, hill', (B 53, Sw 98 'mountain').

F *vuori* 'mountain, mount, rock, hill'.

Karelian *vuori* 'rock', Komi *vēr*, *vyr* 'forest', Mansi *bor*, *ur* 'ridge'.

Tam *porai*, *porrai* 'mountain, hill', Kan *bōre* 'hill, hillock' (DED 4595).

M *orui* 'summit, peak', Tungusic *bori* 'ibid'. (Illič-Svityč 1965)

J *mori* 'Wald'.

Q *urqu* 'mountain, hill'.

Note PFU, U? \* *were* (*wōre*) 'Berg' (Rédei et al 1988), PKJ \**morix* 'mountain' (Martin 1966) and possible Nostratic connections A *forest*, G *Berg* etc.

403. Proto-DURALJAN \**wōsi* 'year', (Sw 199 'year').

F *vuosi* 'year', *vuottaa* 'to wait'.

E *tānāvu* 'in this year', ED *voos* 'year', Komi *vo* 'year', H *al*, *-aly* 'year (in compounds'.

Tam *yānṭu*, *ānṭu* 'year, age', *āṭṭai* 'every year', Kan *vantu*, *vanti*, *ontu* 'a turn, time', Telugu *vantu* 'a turn by rotation' (DED 5153, 979).

Q *wata* b) 'year'.

404. Proto-DURALJAN \**ūkte-e* 'nine'.

F *yhdeksän* 'nine'.

E *ūheksa* 'nine'.

M *yisün* 'nine'.

Q *isqun* 'nine'.

Note PU \**ūkte e-k-s-ā-n* 'one is not beeing' and Proto-Turkish *üyägun* 'nine'.

405. Proto-DURALJAN \**ūkte* 'one', (B 61, Sw 109 'one').

F *yksi* 'one'.

E *üks* 'one, Mari *ikte*, Mansi *ūx*, *āk* 'one'.

Telugu *oka* 'one' (DED 990b).

J *ikkai* 'einmal', *ikken* 'alleinstehend', *ikko* 'ein einzelnes Ding'.

Q *huk* 'one

Note PFU \**ikte* (*ūkte*) 'ein, eins' (Rédei et al 1986).

406. Proto-DURALJAN \**ülen* 'much, very'.

F *ylen* 'exceedingly, too, too much, highly, greatly etc.'

Lappish *ollo* 'much, very'.

M *olan* 'many'.

Q *allapa* 'muy, mucho', *alín* 'good'.

407. Proto-DURALJAN \**üm-* 'to understand'.

F *ymmärtää* 'to understand', *ympyrä* 'circus', FD *immeinen* 'human being', F *ihminen* 'man', *ihmetellä* 'to wonder'.

E *ümber* 'around, about', *ümar* 'round', *ümmardada* 'to serve', *imestada* 'to wonder', *inimene* 'man'.

Tam *uṇar* 'to know, to consider' (DED 603).

J *omou* 'denken', *omoi* 'Gedanke, Meinung'.

Q *uma* 'head, intelligence'.

408. Proto-DURALJAN \**üe* 'night', (B 58, Sw 105 'night').

F *yõ* 'night'.

E *öö* 'night', Komi *voi, oi*, H *éj* 'night'.

Kurux *ūxā* 'darkness', Malto *úqe* 'dark' (DED 730).

J *yo* 'Nacht'.

Note PKJ \**je* 'night' (Martin 1966).

## DISCUSSION

The number of the cognate candidates and lexical items in the word-list presented is remarkably high. With 408 Finnish key-words there exists a cognate candidate from the Dravidian languages in 336 items (82%) where 253 (62%) from Tamil, from Quechua in 315 items (77%), from Japanese in 260 items (64%), and from the Altaic languages in 240 items (59%) where 208 (51%) from Mongol (Table 1). In 104 items (25%) the Finnish key-word had a cognate candidate in all four other languages or language groups compared (quintet), in 152 items (37%) a cognate candidate in three other languages (quartet), in 125 items (31%) in two other languages (triplet) and in 29 items (7.1%) in one language (pair). About 40 additional pairs have been presented in the notes. The total number of pairs should have been much higher.

**Table 1.** The number of cognate candidates in the word-list of the major agglutinative languages of the DURALJAN superfamily<sup>1</sup>

	N	%
In Finnish (key words)	408	100
Their etymological background, at least		
Baltic-Finnic	394	97
Fennic-Volgaic or Fennic-Permian	265	65
Finno-Ugric	202	49
Uralic	94	23
In Dravidian languages	336	82
from which in Tamil	253	62
In Quechua	315	77
In Japanese	260	64
with an Korean-Japanese background	63	15
In Altaic languages	240	59
from which in Mongol	208	51

1) The word list include a group of 5 cognate candidates in 104 items, 4 c.c. in 152 items, 3 c.c. in 125 items and 2 c.c. in 29 items.

2) Percental proportion of Japanese words with a Korean-Japanese background among all Japanese words is 24%.

Of the 408 Finnish key-words 394 (97%) had at least a Baltic-Finnic background, 265 (65%) at least a Volgaic-Fennic or a Permic-Fennic background, 202 (49%) a Finno-Ugric background, and 94 (23%) the Uralic background. Of the 259 Japanese words, connections with the Proto-Korean-Japanese (Martin 1966) was discovered in 63 items (24%). Of the Quechuan and Dravidian words only very few were loans (Table 1).

The extensiveness of the word-list, the high number of five or four simultaneous cognate candidates among 408 lexical items and the significant accentuation of the etymological background of the cognate candidates to the oldest layers of the languages investigated give sufficient ground for the detailed discussion from the viewpoint of the DURALJAN hypothesis.

## **1. Answers to critical comments**

The hypothesis of the DURALJAN superfamily has not given rise to a debate in the linguistic journals. However, the referees of several journals have presented critical comments about the writer's earlier manuscripts. Also the article concerning the relatedness of Finnish, Quechua and the Dravidian languages published by Anttonen in a Finnish newspaper (Anttonen 1986) was commented by some Finnish linguists. The criticism was focused mainly on six claims: 1. The similarities found are caused by a chance. 2. The similarities are caused by some psycholinguistic factors. 3. The similar words are loans, especially from Chinese. 4. The word-list does not include an adequate content of words of the basic vocabulary. 5. The morphological features have not been studied at all. 6. The phonological comparison and the reconstruction of the common protolanguage have not been performed. I shall deal with all these themes here:

### **1.1. The effect of the chance**

The lexical similarities between Uralic, Altaic, Dravidian, Japanese, and Quechua have been explained to be caused by a chance. Theoretically, it is possible to calculate the effect of chance by a model originally presented by Feller and applied by Jokela (see Hakola 1989). If one assumes (a) that two languages have the same number of words, (b) that the words of these two languages form phonetically similar pairs, (c) that the

semantic distribution of the words is completely identical in both languages, (d) that each sound has one and only one meaning, and (f) that these two languages are not at all related to each other and have not borrowed words from each other, it is probable that only one such pair of words can be found that the same sound corresponds to the same meaning in both languages. The probability that the sound-meaning correspondences found are not due to a chance is 99.9% e.g. in the case of 5 matches. Empirically, Bender (1969) has demonstrated that the occurrence of sound-meaning correspondences between any two particular languages due to mere chance is very small. At the 99% level of confidence no more than 3 CVC or 4 CV -correspondences were found by a chance. The hypothesis that in five non-related languages there exist one hundred similar sound-meaning sets leads in the probability calculation to so a great divisor that compared to this the mass of our solar system expressed in grams is a rather small number. So, the chance hypothesis must be totally annulled.

## **1.2. Psycholinguistic factors.**

It has also been suggested that the similarities are caused by some psycholinguistic factors. The word list contains some lall-words or nursery terms (in groups 8, 11, 26, 227, 330, 343), several onomatopoeitic groups (1, 33, 77, 113, 232, 249, 260, 333, 337, 358), some descriptive groups (7, 124, 233, 256, 306, 314, 359) and further few physiologically imitative groups (48, 220, 256). I have included them into the list of cognate candidates because it can be supposed that earlier languages have contained a greater portion of such words than present languages. When such words are totally rejected we can miss an essential part of the object investigated. The ancient words may be comprehended today only as onomatopoeic. I hope that the reader will pay attention to the close similarity of several Japanese onomatopoeic words (in groups 111, 200, 235, 247, 252, 255, 264, 283, 292, 300, 319, 351, 363) with the reconstructed words of Proto-DURALJAN.

The complete excluding of the onomatopoeic words from the study would be incorrect because these words form an essential part of speech also in the modern languages of the DURALJAN superfamily, e.g. Tamil, Japanese and Finnish. It has been said that onomatopoeic words are so numerous in modern standard Tamil that they fill an entry

dictionary (Steewer 1987). The same is also true about Finnish. The use of duplicate words and echoes is typical of Tamil but also of Finnish, Estonian, Japanese, and Quechua. The Japanese manner to complete the meaning of a neutral universal verb with a descriptive onomatopoeic word is almost regular in some Finnish dialects. The weight of these words as a proof relatedness is, of course, light.

Should the remaining 383 similarities be interpreted as indications of some universal symbolism the finding would still be significant. However, such hypothesis is hazardous, and the possibilities of relatedness and loan-words must first be totally excluded.

### **1.3. The part of loans.**

I have made an effort to exclude the late Indo-European loan-words totally. Some referees have found few Chinese or early Indo-European loans from my papers and therefore rejected the remaining finding. Some few early Indo-European and Chinese loans are included because the early loans will help the timing of the separation process. Chinese loans in Finnish and Quechua or Proto-Indo-European loans in Japanese would in itself be an interesting phenomenon. For the reader's consideration these words have been marked with notes. The opposite loaning, which has been rarely considered before, is also possible.

An additional evidence of a word's old background and originality is its frequent use in the language. The loans can rarely obtain such a central position in the language. In modern Finnish, the total frequency of ten most commonly used words is 17.5% (Saukkonen et al 1974). Among them, five stems belong to the word-list presented (in groups 10, 55, 221, 276 and 334). The frequency of these five words is 12.2% in total. Correspondingly, the total frequency of 100 most commonly used words is 35%. One third (32) of them belong to the word-list presented.

### **1.4. The items of basal vocabulary and other areas of interesting meanings.**

Some referees have claimed that the lists of lexical similarities in the DURALJAN-superfamily did not contain the words of basal vocabulary. This argument is incorrect.

On the contrary, the proportion of words of basal vocabulary is rather high also in the present word list. This list includes 156 word-groups which fit to Swadesh' list of 200 items and 110 to Bender's list of 100 items, correspondingly. Remarkably many groups mean different types of rain (129, 149, 252, 292, 300), cold (66, 69, 148, and 154) and fire (159, 219, 280, 326, 327, and 348).

Along with the basal vocabulary the word-list contains many groups with meanings which are interesting from the viewpoint of relatedness. Family connections and relationships are described by 11 further groups (8, 11, 17, 24, 28, 75, 160, 206, 297, 356, and 389). Twenty-six groups (6, 13, 14, 35, 39, 56, 67, 81, 83, 116, 172, 203, 213, 216, 222, 224, 282, 303, 315, 331, 337, 339, 352, 383, 386, and 401) connect with weapons, using of weapons, hunting and handling the prey animals. The only weapon term common to Proto-Indo-European is F *kuras* 'knife', in the group 127 (note Arestian *karata* 'knife', Huld 1993, PIE *\*k(o)rt* 'knife', Delamarre 1989). The meanings with connections with the making of threads and textiles are also very numerous, namely 24 (95, 104, 105, 106, 144, 205, 209, 211, 214, 230, 243, 251, 261, 264, 296, 299, 312, 322, 331, 332, 335, 352, 386, and 399). In the same way as in the article of Anttonen and Hakola (1994) about 40 groups mean various types of verbal expression (1, 27, 31, 45, 61, 89, 95, 105, 110, 112, 115, 117, 121, 145, 172, 179, 212, 217, 232, 240, 241, 245, 246, 248, 257, 258, 272, 277, 278, 288, 296, 310, 328, 344, 358, 371, 375, 377, 378, 388 and 399). Seven of them have a connection with making of threads and textiles (95, 106, 145, 296, 310, 388, and 399).

Five groups (68, 140, 199, 293, and 351) refer to handling of clay and possibly to pottery, four groups (317, 318, 323, and 397) to elements of agriculture and four (68, 122, 127, and 376) to foundry technics and first metals gold, copper and silver. Seventeen groups (31, 61, 106, 112, 136, 145, 179, 245, 246, 310, 328, 345, 371, 376, 378, 380, 392, and 399) include words of administration and legislation, which suggest that society had been reached a rather high level at the time of unity of the DURALJAN superfamily. The word-list includes seven groups of sacred terms (21, 50, 58, 178, 277, 373, and 374); several of them are important also today. They differ essentially from the religious vocabulary of Proto-Indo-European presented by York (1993).

Pronouns and numerals are commonly considered to be good indicators of the relatedness of languages despite the broad variation of their sound also in closely related languages and dialects. In the present word-list a close similarity of pronouns exists only between Uralic and Altaic families (groups 103, 183, 187, 188, 305). In two groups the cognate in Quechua is possible (187 and 334). In numerals, only one group includes cognate candidates from all five language families, namely four (F *neljä*, H *négy*, Tam *nāl*, *nālku*, M *dörben*, Chuvash *tāvata*, Korean *nēy*, Old Japanese *yō*, Q *tawa*). In these groups, the differences in sound are not greater than in the corresponding Indo-European group (Sanskrit *catvāras*, Latin *quattuor*, Greek *tēssares*, Armenian *cōrkh*, German *vier*, A *four*, Polish *cztery* and Latvian *cetrinieks*). Four possible cognate candidates exist in three sets, namely in numerals one (405), five (396) and seven (295). Three cognate candidates exist in one group (123). The closest similarity in sound exists again between Uralic and Altaic numerals but surprisingly several Quechuan numerals have some resemblance with Altaic numerals, a fact to which Dumizél (see Menges 1964) had early paid attention. Numerous indefinite words of multitude and quantity give reason to suppose that the systems of numerals have been rather undeveloped in Proto-DURALJAN (86, 168, 190, 237, 291, 347).

### **1.5. The morphological aspects of the major agglutinative languages.**

In the former papers of Anttonen and the present writer only a minor attention was paid to the morphology. However, yet a very superficial inspection of the major agglutinative languages reveals several important similarities. They all are agglutinative, of course, but they agglutinate the parts of words also with a very similar way. The word begins with a stem which is mono- or disyllabic. Then derivational suffixes come and thereafter inflectional suffixes. Derivational suffixes can assimilate with the original stem so closely that the identification of both these parts may cause problems. In modern Japanese separate particles are used instead of some inflectional suffixes.

The major agglutinative languages show also some synthetic features. Most clearly these traits are visible perhaps in the Dravidian languages, Japanese and in modern Finnish where the use of compounds is increasing rapidly especially in the bureaucratic language.

In an early work Menges (1964) called attention to many similarities in morphology and syntax of the Uralian and Dravidian languages. His conceptions were more recently confirmed by Tyler (1968) and by a Russian linguist Andronov (1969) whose paper has been surveyed in English by Eronen (1972). In Proto-Uralian is considered to have existed some six cases whereas in Old Tamil eight. Genetive ending in Proto-Dravidian is *\*-in*, in several Uralian languages *-n*. The suffix for the instructive is *-n* in Finnish, Tamil, Kannada, Kota, Kodagu, Konda and Gondi. The old Uralian ending for the accusative was *\*-m* and the corresponding ending in Proto-Dravidian *\*-am*. Lative-dative ending in Uralian was *\*-k*, in e.g. Tamil *-ku*. Plural suffix *-t* is known in many Uralian and Dravidian languages.

The personal endings of the verb have probably developed from corresponding personal pronouns (see group 221). The suffixes for the past have been *\*-i*, *\*-s* and *\*-t* in Proto-Dravidian, whereas in several Uralian languages *\*-i* or *\*-ś*. The present tense and future are alike. The possessive construction typical of Finno-Ugric is met also in Tamil: the possessor alone is inflected, the thing possessed stand in nominative with an uninflected form of the auxiliary "to be". Another typical syntactic phenomenon is the placing of the attribute before the word it defines.

An interesting matter is that Cole (1983) has used Japanese, Quechua and Hungarian to exemplify certain general laws of the structure of languages.

The more detailed analysis of morphological and structural aspects of these five quite disconnected language families which include numerous separate languages, is a very laborious task and demands thorough knowledge of all these languages studied. Of the numerous experts of the Uralic, the Altaic, the Korean-Japanese, and the Andean languages several, like Collinder, Janhunen, Kazár, and Räsänen, have mastered two of these groups, Bouda, Campbell, and Illič-Svityč three but in the world there do not exist perhaps many who are alone capable of unravelling the morphological aspects of the major agglutinative languages. It was not the aim of the present study, either, and it is so referred to the future.

### **1.6. The phonetic laws and the reconstruction of the common protolanguage.**

Several referees have criticized my previous manuscripts because I have not presented the reconstruction of the proto-language hypothesized by me. My opinion is that this demand has been excessive and rather unfair at the previous stages of studies. Rédei's team and Janhunen published their famous reconstructions of Proto-Uralic more than 250 years after the primary invention of von Strahlenberg. The reconstructions of Proto-Indo-European have been evergreens in comparative linguistics also during recent years (Delamarre 1984).

On the ground of the word-list presented, however, it is possible to take the first cautious step forward in order to sketch the outlines of Proto-DURALJAN. In aiming at this goal the existing reconstructions of the subfamilies of the DURALJAN superfamily help the trial. Besides them there is also another essential guiding principle: the extreme conservatism of three languages belonging to the DURALJAN superfamily, namely Finnish, Tamil and Quechua. Everybody can be convinced of this phenomenon by becoming acquainted with the reconstruction of the proto-language by Rédei's team or Janhunen, in the case of Finnish, reconstruction by Parker, in the case of Ayacucho Quechua and the phonetic laws presented by Burrow and Emenau, in the case of Tamil. If a phoneme has stayed unchanged in these three languages during all, it is true, various time-depths of these studies, the reasonable hypothesis is, that the same stability has existed also during earlier times. On the ground of the before-mentioned deduction I try to frame several phonetic laws for the DURALJAN superfamily (table 2), even if I am fully aware of the difficulties of this task. When one is willing to dive in a time-depth of approximately ten thousand years he will meet beside obstacles expected also odd and strange problems.

I shall limit the first step to the first word-initial consonant and to the first vowel. In the major agglutinative languages only the first syllable always belongs to the stem. The second syllable also often belongs to the stem, but in many cases it contains a suffix. In several words it is very difficult, even impossible, to distinguish whether a disyllabic word is a disyllabic stem or a monosyllabic word with a suffix. In addition to this, such features as the consonant gradation and total or partial consonant assimilation typical

**Table 2.** The probable and nearly probable phonetic correspondences in the DURALJAN superfamily. The first step toward phenetic laws.

	Consonants and semivowels <sup>6,7,8</sup>							Vowels <sup>9</sup>				
	stops	nasals	laterals	tap	glides	other consonants <sup>10</sup>						
DURALJAN	*p *t *k	*m *n	*l	*r	*w *y	*s *x		*i	*e	*a	*o	*u
FINNISH <sup>1</sup>	p t k	m n	l	r	v j	s h		i	e	a	o	u
TAMIL <sup>2</sup>	p t k,c	m n, ñ	l, ĩ	r	v ?	c φ		i	e	a	o	u
MONGOL <sup>3</sup>	b t,d k,g,y	m,b n,d	ʔ <sup>11</sup>	r <sup>11</sup>	b ?	s x		i	e	a	o	u
JAPANESE <sup>4</sup>	b,f t,d k,g	m n	r,y	r	w y	s h		i	e	a	o	u
QUECHUA <sup>5</sup>	p t k,q	m n, ñ	l, l	r	w y	s q		i	?	a	?	u

1) The phonemic symbols are used as in Finnish well-established orthography. Note that letters j, ä and ö are pronounced in the same way as in German, and Finnish y as German ü.

2) Symbols as in the transliteration used by Burrow and Emenau 1984.

3) Symbols as in the transliteration used by Lessing 1960.

4) Symbols as in the transliteration used by Sanseido Co 1966.

5) Symbols are used as in the orthography used by Parker 1969.

6) In word-initial position.

7) With several precautions are supposeable also a lateralized nasal ñ, velar nasal ŋ, a palatalized lateral ĩ and a retroflex stop c.

8) The gaps in reconstructed words are filled by several Proto-Uralic phonemes, \*ð, \*ä, \*ü reconstructed by Janhunen (1981) or Rédei et al (1986, 1987, 1988). As symbol for unidentified vowel is used 3.

9) In initial syllable.

10) Sibilants, affricats, retroflex.

11) Not in word-initial position

e.g. of Finnish hampers the analyzing of consonants in the middle position. On the phonology of vowels the vowel harmony is a similar complicating factor.

The bilabial, dental and velar stops have presumably existed in Proto-DURALJAN and with few exceptions have been presented in Finnish, Quechua and in most of the Dravidian languages. Little more variation they show in Altaic languages and in Japanese. These stops have been preserved soundless in Finnish, Estonian and Ayacucho Quechua and most of the Dravidian languages. In some surroundings these are sounded in Kannada, Mongol, modern Japanese, and Karelian. The bilabial stop /p/ exists no more in Mongol nor word-initial in Japanese. It is replaced in Mongol with /b/ and in Japanese with /b/ or /f/. (Note, that Japanese /f/ is sounded bilabially). The velar stop /k/ is in Quechua, especially in the Ayacucho dialect, often replaced by post-velar voiceless spirant /q/. Both variants may occur simultaneously in the lexicon.

The nasals /m/ and /n/ also show solid stability. In over twenty sets Proto-DURALJAN \*m/ supposed had been preserved unchangeably with the exceptions in Mongol where it is in two sets replaced with bilabial sounded stop M /b/. The bilabial nasal phoneme has been steadfast also in the Indo-European languages (Delamarre 1984). Alveolar nasal /n/ occurs as a word-initial in almost twenty sets. There are only seven exceptions. They include Japanese /w/ and /m/ in Quechua which both can be abandoned at this stage. Mongol /d/ and palatalized nasal Quechua /ñ/ are possible changes. The last-mentioned nasal phoneme occurs besides Quechua also in the Proto-Uralic and Dravidian languages. Its existence in Proto-DURALJAN seems to be possible, but the material is not sufficient for outlining a phonetic law. Velar nasal /ŋ/ occurs in Finnish, Proto-Uralic and Dravidian languages and one can suppose that it has existed also in Proto-DURALJAN. It does not occur as a word-initial in this corpus.

Glides or semivowels show remarkable variation e.g. in the Indo-European languages but in this material they have remained outstandingly constant. I can assume Proto-DURALJAN \*/y/ (= F /j/), which occurs in 9 sets. The few exceptions in Japanese and Quechua can be abandoned at this stage of the study. The variance of the bilabial semivowel /w/ is somewhat greater. This phoneme occurs as a word-initial in 32 sets. In Finnish and in Estonian its variant is always /v/ and in Quechua /w/. In Tamil, the variant

is mostly /v/, but in three sets /p/. Because this variant is more common in other Dravidian languages, I suggest that both /v/ and /p/ are acceptable. The Altaic languages are problematic. Turkish uses /v/ in many sets but in Mongol \*wa and \*we have changed into /u/. A similar development has perhaps occurred in Japanese. A correspondent phoneme is /w/ in ten sets, but other cases vary widely (/u/, /f/, /b/, and /m/). I presume, however, that the correspondent phoneme in Proto-DURALJAN has been \*/w/ like in Proto-Uralic, and most of the aforementioned variants may be acceptable.

Laterals and taps are somewhat problematic. As it is well known their pronunciation varies widely in the dialects of many languages. The lateral /l/ does not exist in modern Japanese. In Quechua there are two phonemes /l/ and /l̥/ as in most of the Dravidian languages. In Tamil /l/ and /r/ often take a prosthetic vowel, mostly /i/. In the word-initial position /l/ and /r/ exist seldom. In the Altaic languages /l/ and /r/ exist as word-initials only in loans. Martin (1966) has supposed their existence in the reconstruction of Proto-Korean-Japanese, neither. In the non-initial position /l/ and /r/ exist with numerous examples in all five language groups and in the word-list presented. Therefore, and also because both Janhunen and Rédei's team include /l/ and /r/ in the phonemes of the Proto-Uralic, these are also included in the possible phonemes of Proto-DURALJAN, in both the initial and non-initial position. The existence of a palatalized /l̥/ as in Quechua, the Dravidian languages and in many Finno-Ugric languages is not impossible.

The obstacles anticipated increase visibly in trying to find phonetic laws for the remaining consonants: sibilants, affricats, and retroflex consonants. Finnish uses only sibilant /s/ and one affricate F /h/, which corresponds to Proto-Uralic s or c. Tamil uses also only one sibilant /c/, whereas Mongol and Japanese from five to seven.

There are good reasons to assume, that Proto-DURALJAN has included at least one sibilant :\*s. The word list contains about 50 sets of cognate candidates with a word-initial F /s/. In about twenty cases the correspondent phoneme in Tamil is /c/. In about fifteen cases the correspondent phoneme in Mongol, Japanese and Quechua is /s/ or /c/. Sibilants (sh), z and affricats/retroflex c (ch) occur in Mongol and Japanese, but their number is below ten. In Quechua č and s are in some cases alternative

variants. One can so reconstruct \*s in Proto-DURALJAN ( \*s > F /s/ : Tam /c/ : M /s/ : J /s/ : Q /s/ ). It seems quite possible that there exists at least one other sibilant or retroflex (Proto-DURALJAN \*c > F /s/ : Tam /c/ : M /c/ . J /c/ : Q /č/ ). The total number of consonants in this group is probably even higher. In the reconstruction of Proto-Uralic Janhunen (1981) has used four consonants of this group (\*ð, \*s, \*ś, \*ć), Rédei's team (1986) seven (\*ð, \*s, \*ś, \*š, \*ð', \*ć, \*č).

In Finnish there exists only one affricate F /h/ which is quite a young phoneme. It is considered to be \*s or c in Proto-Uralic. F /h/ occurs as a word-initial in twelve sets. The distribution of correspondent phonemes in other languages varies considerably. The commonest are /x/ (three cases) in Mongol, /h/ (five cases) in Japanese and /q/ in Quechua. In the Dravidian languages loss of this phoneme in the word-initial position is possible. With many precautions one affricate may be supposed, marked Proto-DURALJAN \*x (near Proto-Uralic ś) (Proto-DURALJAN \*x > F /h/ : Tam/Dravidian /φ/ : M /x/ : J /h/ : Q /q/ ).

The phonology of vowels may be that needle's eye which impedes the DURALJAN hypothesis from getting into neogrammarians' heaven of exactly fitting phonetic laws. Eight monophthongs, all both short and long and sixteen diphthongs exist in Finnish whereas according Parker (1969) in Quechua only three short vowels and none vowel clusters. The trial will be difficult but perhaps not impossible. Few neglect the close relatedness of Estonian and Finnish despite the fact that Estonian short /õ/ has eight vowel correspondences in Finnish. About similar relation can be found between Old French and modern Spanish.

The first step again is easy, however. Vowels /a/, /i/ and /u/ occur in all language families. The word-list contains dozens of examples of direct correspondences of the open vowel /a/, and over ten examples of the high vowels /i/ and /u/. The reconstruction of \*a, \*i and \*u seems to stand upon a rather confident base.

Vowels /e/ and /o/ are more problematic. As already mentioned Parker (1969) does not include these vowels in the phonemes of Ayacucho Quechua nor in the phonemes of Proto-Quechua reconstructed by him. However, Perroud and Chouvenc (1970) and

Middendorf (1970) present several examples of occurrence of these vowels in Quechua words. They rarely exist in my word-list. Several correspondences can be found in Finnish, Tamil, Mongol and Japanese (in Japanese F /e/ : J /*ü*?/) but in Quechua only few (2-3). Because Rédei's team and Janhunen have accepted these vowels into the reconstruction of Proto-Uralic, and Martin (1969) into the reconstruction of Proto-Korean-Japanese, \*e and \*o may be included with many cautions also in the vowel system of Proto-DURALJAN.

Very complicated the situation is with front vowels and diphthongs. According Parker (1969) they lack from Quechua, but are numerous in old Japanese and in the Altaic as well as Uralic languages, as already mentioned. In Finnish three front vowels and 18 diphthongs exist. I consider that the present corpus is not sufficient for unraveling this problem. More material would be achieved if in the corpus e.g. also the pairs of two languages and groups without the Finnish key-word were included. Some interesting correspondences have perhaps been found, however. For example, a Proto-DURALJAN \**ü* is not impossible (DURALJAN \**ü* = P-Uralic \**ü*, F /y/ : Dravidian /o/u, M/φ/y/ : J /a/? : Q /a/, see the sets 152 -164, 270-272 and 324-329). The sets 39, 97 and 243 suggest the correspondence of F /ei/ : J /u/.

One of the most difficult problems is the distinction between short and long vowels. Long vowels lack from Quechua which perhaps depends on the influence of Spanish. In four other language families the length of vowels is a very important distinctive feature and therefore their existence is probable also in Proto-DURALJAN. Janhunen (1981) and Rédei's team (1986, 1987, 1989) have not used long vowels in the reconstruction of Proto-Uralic.

As the conclusion, the following phonemes can quite probably be supposed to exist in Proto-DURALJAN: \*p, \*k, \*t, \*m, \*n, \*w, \*y, \*a, \*i, and \*u. Nearly probable are \*l, \*r, \*s, \*x, \*o, and \*e. With several precautions are also probable \*c, \*ñ, \*ŋ, and \*ī. The reconstruction of Proto-DURALJAN words has been performed by these phonemes. In the reconstruction of the remaining phonemes sibilant/affricat *ð* and two front vowels \**ä* and \**ü* of the reconstruction of Proto-Uralic of Janhunen (1981) and of Rédei's team are used. In order to avoid an overwhelming amount of question marks all

beforementioned phonemes are also used in later positions despite the possible error of this procedure. A question mark is used after the word only when its reconstruction seems to be very problematic. An unknown vowel is marked with 3. Because of the tentative character of the 'phonetic laws' presented phonetically deviating words have not been excluded from the word-list.

## **2. The compatibility of the present findings with other studies**

The literature concerning the relatedness of the language families belonging in the DURALJAN superfamily is not sparse. From the first time the hypothesis of the relatedness of Dravidian and Scythian (= Ural-Altaic) languages has been presented by Caldwell in 1856 (see Menges 1964). Nearly just as old is the concept about a relatedness between Uralic and Altaic languages (see Räsänen 1950). The relatedness of Japanese with Korean has been proposed as early as in 1717 by Arai Hakuseki and the relatedness of Japanese with Ural-Altaic languages by Boller in 1857 (see Miller 1971). The first samples of the similarities between Quechua and Finnish were presented by Lewy in 1929 (see Menges 1964). Criticizing Schrader's (1925) study on a relatedness of Dravidian and Uralic languages Lewy demonstrated 62 convincing Quechua-Finnish word-comparisons. However, Lewy considered that these similarities had been caused by merely a chance and he neglected the suggestions of Schrader. Separately, several years later Dumézil (see Menges 1964) called attention to similarities between Turkish and Quechua e.g. in numerals.

I have not had a possibility to become acquainted with the abovementioned early works. Unfortunately, too, I have not got into my hands two important later works, namely that of Kazár (1980) about the relatedness of Uralian and Japanese and that of Ohno (1980) about the relatedness of Dravidian and Japanese. Therefore I must limit my discussion to these few studies which have been available.

In 1953 Bouda presented 137 Dravidian-Altaic and 28 Dravidian-Uralic word comparisons in his study on Dravidian and Ural-Altaic. Of them 31 are included in the present study. Bouda regretted the lack of a good etymological dictionary of Dravidian. In his book *Fenno-Ugric Vocabulary* Collinder (1977) called attention to the fact that

many Uralic words have striking counterparts in Turkish, Mongol and Tunguz. From his list of 72 Ural-Altaic words 35 (49%) are included in the present study.

Of the 250 Quechua-Finnish word-pairs presented by Anttonen (1972) about 100 are included in my word-list. Anttonen did not perform any systematic phonological comparison. In several papers, Campbell has emphasized the effect of chance, diffusion, and universals as causes of lexical similarities. In 1972 he presented 13 plausible similarities between Finnish and Quechua. Of these 10 occur also in the present word-list. Quechua's relations in the Amerind superfamily (Greenberg 1987) I have regarded as exceedingly heavy to unravel.

After writing my manuscript I got into my hands three very interesting works, the first one of Illič-Svityč (1965), the second one of Tyler (1968) and the third one of Bomhard (1992). Because these works have neither had any influence on my word-list nor on my trial to seek phonetic laws for the DURALJAN superfamily they may be used for the judgement as the double-blind studies in medicine.

Illič-Svityč (1965) has included Indo-European, Kartvelian, Afroasiatic, Uralic, Altaic and Dravidian language families in the Nostratic phylum. Its western branch is constituted by three first-mentioned families whereas its eastern branch by Dravidian, Uralic and Altaic families. In the shortened version of his planned etymological dictionary Illič-Svityč presented about 600 Nostratic etyma and their reconstructed proto-words. This word-list included about 180 etyma with a connection to Finnish and Dravidian and/or Altaic words. About one half of these etyma corresponded with some group in my word-list. Illič-Svityč also presented 18 groups which were not found by me. I have not added them in my sample.

Illič-Svityč also presented the phonetic laws of Nostratic phylum. They include e.g. the following correspondences of Uralic, Dravidian and Altaic proto languages (in that order): p, p, p'; p, p, p'/b; p, p/v, b; t, t, t'; t, t, d; k, k, k'; k, k, g; m, m, m/b; n, n, n; ñ, ñ, n; w, v, b/φ; j, j/φ, j; i/y, i/y, i/y; e, e/i, e/i; a, a, a; ä, a, ä/i; o/a, o/a, o/a; u/ü, u, u/ü. So, the differences between the phonetic laws of Illič-Svityč and these proposed by me in the present study are quite minor.

More recently Koskinen (1980) had published an etymological dictionary of the Nostratic phylum. Because he did not count Dravidian in this phylum, the Uralic-Altaic word-pairs of his study did not aid me to continue my word-list.

In 1968 Tyler presented 153 Dravidian-Uralic word-comparisons 109 of which have a connection to some Finnish counterpart. The compatibility with my word-list was adequate. Of these 65 (60%) Dravidian-Uralic word-pairs connected to Finnish were identical with some Dravidian-Uralic pair included in my wordlist. Tyler did not reconstruct the proto-words but he listed the phonetic correspondences of Proto-Uralic and Proto-Dravidian. I note some examples of the most common correspondences of Proto-Uralic and Proto-Dravidian (in the word-initial position, in that order): p, p; k, k; m, m; n, n; w, v; i, i; e, e; a, a; a, a; ä, a; o, u; u, u. The compatibility with the phonetic correspondences proposed by me is again fair.

In his survey of the studies on the Nostratic superfamily Bomhard (1992) included in this phylum Uralic-Yugagihir, Elamo-Dravidian, and Altaic but not Japanese. In the Nostratic sound correspondences were presented e.g. following Proto-Uralic, Proto-Dravidian, and Proto-Altaic correspondences (in that order, consonants in the word-initial position): p, p, p/b; t, t, t/d; k, k, k/g; m, m, m; n, n, ?; l, l, ?; w, v/φ, ?; y, y/φ, y; s, c, s,; i, i, i/i; e, e, e; a/ä, a, a; o, o, o/ö, u, u, u/ü. The compatibility of these correspondences of proto-languages with the correspondences of the surface phonemes presented in Table 1 is rather good.

The studies on the Nostratic phylum demonstrate the possibility that the problems of the DURALJAN superfamily can be approached also from the opposite direction, from a greater time-depth. The unraveling of the relations of the DURALJAN superfamily with Indo-European and Afroasiatic families did not belong in the area of this study. A superficial view of the vocabulary of Proto-Indo-European (Delamarre 1984) showed several similarities but their number is clearly smaller than those in the sphere of the DURALJAN superfamily. In the word-list presented connections to Indo-European words are proposed at least in 50 groups.

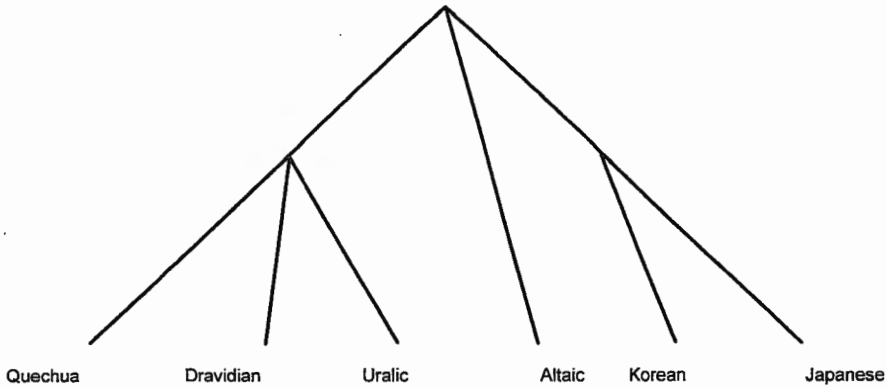
I hope that in the near future an aspect will open for regarding the DURALJAN superfamily of the very greatest time-depth, namely from the first stages of the development of human languages. On the area of the glotto-genetics, the research is advancing rapidly. Regrettably I have not got an opportunity to become familiar with the vocabulary of the "Mother Tongue" (see Shevoroskin 1990).

### **3. When and where Proto-DURALJAN was spoken?**

A hypothesis of the relatedness of some languages raises the questions of the timing of the separation of these languages, that of their pedigree and of their original homeland (Urheimat). At this phase of study no definite answers can be given to these problems but perhaps one is allowed to reveal some observations.

The preliminary glottochronological calculation (Hakola 1989) suggested that the separation of Finnish and Tamil and that of Finnish and Quechua would have occurred some 6,000 - 7,000 years ago and the separation of Finnish and Mongol and that of Finnish and Japanese some 9,000 - 10,000 years ago. It is not correct to do any new glottochronological calculation on the ground of the present word-list because many cognate-pairs are lacking especially from the other languages than of Finnish. However, it is possible to say that the numbers of the cognate candidates are in line with the preliminary glottochronological calculation. With the Finnish key-word, the number of the cognate candidates of the Dravidian languages and Quechua was clearly higher (in 323 and 309 items, respectively) than those of the Altaic languages and Japanese (in 231 and 257 items, respectively). The preliminary pedigree model would so be sketched as in Figure 1.

When we take into account the proportion of the Finnish words with the Fennic, the Finno-Ugric and the Uralic background and the proportion of the Japanese words with the Korean-Japanese background we shall get quite an interesting view. The proportion of the Finnish key-words with the Uralic background is at about the same level as that of the Japanese words with the Korean-Japanese background, namely one fourth. The separation of the Finno-Ugric group had been considered to happen some 5000 years



**Figure 1.** The pedigree of the DURALJAN superfamily

ago, the separation of Japanese from the Korean-Manchuan language some 6000 years ago and the same time-depth of 6000 years is the estimated separation time of the Uralic languages. So, the proportion of cognate candidates refers to the problem called attention to by Eronen (1977): The distance between Finnish and the Samoyed languages seems to be greater than between Finnish and the Dravidian languages. It is quite possible, however, that the languages of the small peoples of the Samoyeds have not been able to preserve the old vocabulary as well as the populations of millions. The great cultural and geographical distances have probable caused such differences between the vocabularies of the families of the DURALJAN superfamily that these are severely judgeable.

Three progresses of events are worth mentioning while seeking the original homeland of the DURALJAN superfamily: 1) The spreading of mankind from eastern Africa to the whole world, 2) The expansion of the late paleolithic microblade culture from Western Europe, and 3) The expansion of the neolithic pottery technic from northern East Asia westwards. Of these possibilities also the two last-mentioned may have been able to cause a population expansion and a spreading of the language.

1. Knowledge on the first pages of mankind's prehistory is rapidly increasing. Fossile findings and genetic facts refer to the fact that *Homo sapiens sapiens* was born about 200,000 years ago in eastern Africa and our species has spread during tens of thousands of years worldwide (Cavalli-Sforza 1991, Tishkoff et al. 1996). The spoken language has expanded at the same time (Cavalli-Sforza 1991). The theories of the spreading of the common language or "mother tongue" is quite compatible with genetic findings (see Scheveroskin 1990). This theory supposes a branch in the mother tongue's pedigree which may be identical with the DURALJAN superfamily. Its separation from the Nostratic phylum which also includes the Indo-European family and the Afro-Asiatic family (Semitic and Hamitic languages) is supposed to happen about 15,000 - 30,000 years ago. In this first possibility only the position of Quechua and Quechua's close similarity with the Dravidian languages and Uralic raise a problem. The common homeland of the DURALJAN superfamily may so have been in western Central-Asia.

2. The second possibility of spreading of the DURALJAN superfamily may be connected to the spreading of the use of late paleolithic blade tools and microlithes some 20,000 - 30,000 years ago from Western Europa rapidly eastwards to India, Siberia, Japan, and also to America. It reached the southern-most part of South-America by 10,000 years b.p. In the present word-list some meanings of weapons, throwing, hunting and prey animals refer to this possibility. In this case, it is probable that the original homeland of the DURALJAN superfamily has not been in Western Europe but the hunting peoples of northern Eurasia have learned this new technic and rapidly moved to new hunting grounds (see Hakola 1989). The position of Quechua remains also now somewhat problematic.

3. The third possibility is perhaps most interesting even if hazardous as an explanation. The first neolithic earthenware pots have perhaps been made in Japan, during the Initial Jomon Pottery period, 12,500 - 7,000 years b.p. (Aikens and Higuchi 1982). Archeological findings show that this technic rapidly spread forward, in Iran 9,000 years b.p. (Singh 1976), in India 8,000 - 7,000 years b.p. (Allchin et al 1978) and in Finland 6,200 years b.p. (Huurre 1979). The first earthenware pots emerged in South-America about 5,500 years b.p. (For further details see Hakola 1989).

The pottery making has been an important factor in the neolithic revolution, with which also the taming of domestic animals and the origins of agriculture were connected. The high temperature of the pottery kiln was an essential prerequisite for the discovery of metals and the invention of metal casting and an important step toward the Chalcolitic and Bronze ages.

The expansion of pottery technic fits well to the pedigree model and the glotto-chronological calculations presented. The word-list also contains numerous meanings which refer to this Neolithic period: several words for clay, some for pottery, one for mould, several names for first metals and casting products, further on for agriculture, grain and textile making. Also in this word-list about forty sets for verbal expression show that the social life, administration and legislation have been developed on a rather high level as Anttonen and Hakola (1994) demonstrated.

In this third possibility, the position of Quechua does not raise a difficult problem. The coast of South America has been possible to reach for Mohenjo Daro's and Harappa's sailors who presumably spoke a Dravidian language. Also for fishers and hunters of northern Eurasia this sea-travel via the North-East passage and the Pacific coast has not been an overwhelming endeavour. In this case the number of immigrants has been limited and so Quechua could be a result of a creolizing process. What have they been seeking after? The answer is simple: copper and other metals. So, northern East Asia, Japan, Korea, or some neighbouring country are the third possibility for the homeland of the DURALJAN superfamily.

#### **4. Concluding comments**

The considerable number of the cognate candidates presented, the plausible quality of their meanings and the quite systematic similarity of their sound in most items lend remarkable support to the hypothesis of the DURALJAN superfamily. At the same time, the genetic relationship between the major agglutinative languages solves several old problems: the relatedness of the Uralic and the Altaic languages (Collinder 1948, 1955, 1977, Räsänen 1950, Bouda 1953), the Ural-Altaic and the Dravidian languages (Bouda

1953, Menges 1964, Tyler 1968, Eronen 1977), Japanese and the Dravidian languages (Ohno 1980) and Quechua, Dravidian and the Uralic languages (Anttonen 1972, 1978).

The magnitude of the hypothesized DURALJAN superfamily is noteworthy. After the Indo-European languages (spoken by over 2000 million people as the native language) and Chinese languages ( over 1000 million speakers ) it holds the third place in the world with nearly 500 million speakers (table 3, Comrie 1987).

**Table 3.** DURALJAN superfamily. The major agglutinative languages and the number of their speakers as home language<sup>1</sup>

<b>Language</b>		<b>Speakers</b>
The	Dravidian family	175,000,000
	Tamil	55,000,000
	Telugu	55,000,000
	Malayalam	25,000,000
	Kannada	25,000,000
	Gondi	2,000,000
	Kurux	1,500,000
	Tulu	1,400,000
	Kui	600,000
	Brahui	400,000
	Other Dravidian languages	5,000,000
The	Uralic family	23,000,000
	Hungarian	14,000,000
	Finnish	5,000,000
	Estonian	1,000,000
	Mordvin	1,000,000
	Other Uralic languages	2,000,000
The	Altaic family	105,000,000
	Turkish	45,000,000

	Other Turkic languages	55,000,000
	Mongolian	5,000,000
The	Korean-Japanese family	180,000,000
	Japanese	120,000,000
	Korean	60,000,000
The	Andean family	12,000,000
	Quechua	10,000,000
	Aymara	2,000,000
	<b>DURALJAN superfamily</b>	<b>495,000,000</b>

1) Sources: Gunnemark & Kenrick 1985, Comrie 1987, Greenberg 1987

The confirming of the DURALJAN hypothesis demands broad studies, yet: The collecting of the common vocabulary of all languages belonging to this phylum, accurate glottochronological calculations, the unraveling of the similarities of morphology, and the reconstruction of the common protolanguage. This task would not be easy. When one will focus on the examinations of rather distant genetic relationships he may be compelled to notice that the recent linguistic methods and laws used in unraveling closer relationships are not adequate (see Greenberg and Ruhlen 1992).

The clarification of the genetic relationships of the DURALJAN superfamily would be an important step forward in order to frame the total figure of the development the human language from the common 'mother tongue' (see Scheveroshkin 1990) to the countless cluster of languages of to-day's world. It would also stimulate the studies of population genetics, archeology and prehistory of the peoples speaking now DURALJAN languages.

## THE APPENDIX

After submitting my manuscript I got into my hands three important works: the first one was Kazár's (1980) extensive study on the Japanese-Uralic language comparison, the second one was the voluminous book of Bomhard and Kerns (1994) on the Nostratic macrofamily, and the third one Koskinen's (1996) interesting monograph about the relations between Dravidian and Nostratic. These three works included many important data from the viewpoint of my recent study. They help me to present new sets of several cognate candidates which filled the including criteria of my study, and in addition to this, they widened and deepened its linguistic scope. Because the complete rewriting of my monograph would be too laborious I shall present my comments and an additional word-list in this appendix.

Constructing on the ground of his vast knowledge of Proto-Uralic and Old Japanese Kazár presented 541 sets of Japanese-Uralic word comparisons. About 220 sets included a Finnish cognate. In about 40 word-pairs the cognates from Finnish and Japanese were identical with Finnish-Japanese word pairs in my word-list. The mediocrity of the concordance of both lists is comprehensible. As mentioned above, Kazár has used mostly words of Old Japanese and the reconstructed forms of Proto-Uralic whereas I have advanced from surface forms of five language families. A better knowledge of Japanese has helped Kazár to use also stems preceded by a prosthetic vowel. As a Hungarian Kazár has broadly used the Ugric words but correspondingly some open Finnish correspondences have not been noticed by him. One cause for differences may also be the fact that I have often used more stricter including criteria for similarity both in sound and in meaning. This is, of course my opinion. Careful attending to Kazár's study using his cognate-pairs helped me to expand my original word-list. In 18 sets a Japanese cognate candidate used by Kazár was added. (A Japanese cognate candidate was added into the groups 18, 53, 59, 67, 92, 133, 146, 163, 171, 188, 208, 215, 218, 278, 312, 338, 341, 394.) The searching of the vocabulary of Quechua, Dravidian and the Altaic languages helped me to find 30 new groups of cognate candidates which fulfilled the including criteria of my study. These groups are presented in the following Additional Word-List.

In his study, Kazár had also listed and counted the phonological correspondences. They are not in strong discrepancy against "the phonetic laws" of the DURALJAN superfamily presented by me on the pages 111-117. For instance, however, I draw attention to one difference. Corresponding Finnish /p/ as the word initial consonant Kazár has accepted in Japanese as I have /f/ and /b/ but also as Martin (1966) has /h/. If this comparison is correct an important question arises: Have partly aspirated stops existed in Proto-DURALJAN as they have in Proto-Nostratic and when did they disappear? They are preserved in Quechua of Cuzco until now (Parker and Weber 1996). If the hypotheses of Martin and Kazár are correct one must suppose that aspirated stops such as \*ph had also existed in Proto-DURALJAN (at least one and at least partly).

Bomhard and Kerns (1994) include seven language families in the Nostratic superfamily: 1) Indo-European, 2) Kartvelian, 3) Afroasiatic, 4) Uralic, 5) Altaic, 6) Dravidian, and with caution also 7) Sumerian but not Japanese. Bomhard and Kerns join Uralic and Yukaghir together as well as Elamite and Dravidian. They consider that Afroasiatic has separated from others first, then Kartvelian, Sumerian and Elamo-Dravidian. The remaining group, Indo-European, Uralic-Yukaghir and Altaic appear to be more closely related as a group than any of them is to the three first-mentioned language families. For this subgroup Bomhard and Kerns accept the name Euroasiatic given by Greenberg (1991).

Opposite to the preliminary paper published by Bomhard alone in 1992 and reviewed before, the voluminous book of Bomhard and Kern is a real etymological dictionary of the languages of the Nostratic superfamily with its 601 items. They have presented also, if possible, the reconstructed words especially from Proto-Indo-European, Proto-Afroasiatic, Proto-Uralic and Proto-Altaic as well as the Proto-Nostratic words reconstructed by them. They have handled also the comparative phonology and presented a survey on Nostratic morphology and syntax.

The word-list of 601 items of Bomhard and Kerns totally includes about 2000 representatives (at least one cognate) from seven language families searched. Of these 2000 representatives over 500 belong to Indo-European, over 450 to Afroasiatic and about 300 to Elamo-Dravidian. The number of the representatives of the other language

groups is significantly smaller: from Kartvelian, Uralic, Altaic, and Sumerian between 110-160.

In the etymological dictionary of Bomhard and Kerns, there exist 116 Finnish words. Without difficulties, I was able to add 66 Finnish words to the word-list, and because all of them are also Uralic, the number of Uralic representatives rose over 220. The number of the representatives reflects Bomhard and Kerns' good knowledges of the Indo-European, Afroasiatic and Dravidian languages but this phenomenon can also be explained otherwise: The etymological dictionary of Bomhard and Kerns included over 420 wordpairs from Indo-European and Afroasiatic, and about 130 of them had no cognates in other language families. So it seems probable, that the relatedness between Indo-European and Afroasiatic is closer than Bomhard and Kerns suggest, and so their findings lend support to the concept of the existence of the western branch of Nostratic phylum proposed by Illič-Svityč (1965).

The etymological dictionary of Bomhard and Kerns had 60 Finnish-Dravidian word-pairs, of which 35 also existed in my word-list. The number of Finnish-Mongol word-pairs was 21, of which 17 existed also in my word-list. Their work help me add 11 items to the additional word-list.

The extensive work of Bomhard and Kerns has received quite harsh critique from Orel (1996) in his review. Orel wrote about the word comparisons of Bomhard and Kerns that " they are bad en masse ". Sidwell presented more detailed methodological critique, but like Orel he blames Bomhard and Kerns that they have not regarded comparisons of Illič-Svityč and the other autors of the Moscovian school. However, many comparisons of Bomhard and Kerns are similar to them. The work of Bomhard and Kerns is very useful for a western reader who does not master Russian completely and for whom the Cyrillic script still causes difficulties.

Recently, in his second monograph, Koskinen (1996) has compared Dravidian with four families of languages: Indo-European, Uralic, Altaic, and Hamito-Semitic (Afroasiatic) which earlier have been named NILAL by him. Koskinen presented 287 items where several had also alternative series of the cognates. Koskinen proposed also the sound

correspondences and some morphological comparisons. I will fix the reader's attention to the similarity of the sound laws of Uralic, Dravidian and Altaic proposed by Koskinen and by me: ( in that order, in word-initial position ): p,p,p/b; t,t,t/d/č/j; k,k,k/g; m,m,m/b; n/ñ/l, n/ñ, n/n(l); w/y(u)/y(o)/yü, v,u/ü/o; y/ø, y, y/ø. The difference between these and the correspondences proposed by me on the pages 111-117 is not great.

In 287 items presented by Koskinen (1996) there are 167 (58%) Indo-European-Dravidian word-pairs, 153 (53%) Uralic-Dravidian, 87 (30%) Finnish-Dravidian, 120 (42%) Altaic-Dravidian and 25 (8.8%) Sumerian-Dravidian, correspondingly. The word comparisons proposed by Koskinen helped me to add 11 new sets of cognate candidates to my Additional Word-List. The Additional Word-List includes also the item *tenava* which is considered by Greenberg and Ruhlen (1992) as an example of an Amerind word innovation.

The concordance of the above reviewed studies with my study can be examined from the viewpoint of probability calculations. The total vocabulary of an agglutinative language may be very numerous in consequence of derivatives and compound words, e.g. in Finnish about one million words. On the contrary, the number of the stems is quite limited. The Dravidian Etymological Dictionary by Burrow and Emenau (1984) includes 5 557 items. The number of Finnish stems has been counted to be 6 000 - 7 000. Using Katsumata's dictionary (1966) I have estimated that the number of stems in Japanese is on the same level. Therefore, I have used in the calculations as the number of stems the figure 6 000.

In the Table 4 I have presented the number of word pairs of the three language pairs compared, namely Finnish-Dravidian, Finnish-Mongol, and Finnish-Japanese in just reviewed studies of Bomhard and Kerns, of Koskinen and of Kazár as well in my own study. Besides these figures, I have presented the number of these word-pairs of the reviewed studies which are concordant with word-pairs of DURALJAN vocabulary. Thereafter I have indicated the percentile part of the Finnish stems belonging to the word-pairs presented by me from the total number of Finnish stems (6 000). Then, one can compare the percentile of Finnish stems appeared e.g. in Finnish-Japanese pairs (4.3%), to the portion of concordant number of Finnish-Japanese word-pairs in Kazár's

**Table 4.** The concordance of the reviewed studies with the author's original Word-List of DURALJAN

The languages compared	The author								The minimum limit of the probability $p < 0.001^2$		
	Bomhard & Kerns Number of the word-pairs		Koskinen Number of the word-pairs		Kazár Number of the word-pairs		Hakola Number of the word-pairs		Bomhard & Kerns versus Hakola	Koskinen versus Hakola	Kazár versus Hakola
	Total	Con- cordant	Total	Con- cordant	Total	Con- cordant	Total	Percentual part from all Finnish stems <sup>1</sup>			
Finnish- Dravidian	60	35	90	40			336	5.3%	10	13	
Finnish- Mongol	21	17	21	11			208	3.5%	4	4	
Finnish- Japanese					220	40	260	4.3%			20

<sup>1</sup> The number of stems has been estimated to be 6 000.<sup>2</sup> The calculation has been performed using the goodness-of-fit test (Jokela, personal communication).

study (40) from the total number of his Finnish-Japanese wordpairs (220). Using the goodness-of-fit test (Jokela, personal communication), already 20 concordant word-pairs exceed the  $p < 0.001$  level of the statistical significance. The table shows that the concordance of my study with the studies of Bomhard and Kerns, of Koskinen and of Kazár, is quite high in all language pairs calculated and higher than the  $p < 0.001$  level of the statistical significance. So the role of chance has been ruled out.

I accentuate that the calculations have been performed on the ground of my original word-list. The word-pairs which exist in the Additional Word-List have not been counted with. When these completions are regarded the concordance of the reviewed studies with my own study will rise to quite a high level.

In the following Additional Word-List the order of the languages and the alphabetical order of the cognate candidates are similar to the original word-list. The references on the works of Illič-Svityč (1965), Kazár (1981), Bomhard and Kerns (1994), Koskinen (1996), and Greenberg (1992) have been indicated.

The number of the cognate candidates and lexical items in the Additional Word-List is remarkable. With 60 Finnish key-words there exists a cognate candidate from the Dravidian languages in 56 items, where 42 from Tamil, from Quechua in 23 items, from Japanese in 33 items, and from the Altaic languages in 31 items where 13 from Mongol. In 2 items the Finnish key-word had a cognate candidate in all four other languages or language groups compared, in 21 items a cognate candidate in three other languages, and in 37 items in two other languages. Of the 60 Finnish key-words 57 had at least a Baltic-Finnish background, 41 at least a Volgaic-Fennic or a Permic-Fennic background, 35 a Finno-Ugric background, and 17 the Uralic background. Of the 33 Japanese words, connections with the proto-Korean-Japanese (Martin 1966) was discovered in 3 items. The total number of lexical items counted together both from the original and from the additional word-lists is presented in the Table 5.

**Table 5.** The total number of cognate candidates in both the Word-List and the Additional Word-List of the major agglutinative languages of the DURALJAN superfamily<sup>1</sup>

	N	%
In Finnish (key words)	468	100
Their etymological background, at least		
Baltic-Finnic	451	96
Fennic-Volgaic or Fennic-Permic	306	67
Finno-Ugric	237	51
Uralic	111	24
In Dravidian languages	393	84
from which in Tamil	295	63
In Quechua	338	72
In Japanese	311	66
with an Korean-Japanese background	66	14
In Altaic languages	271	58
from which in Mongol	221	47

1) The word list includes a group of 5 cognate candidates in 106 items, 4 c.c. in 173 items, 3 c.c. in 162 items, and 2 c.c. in 29 items.

2) Percental proportion of Japanese words with a Korean-Japanese background among all Japanese words is 3%.

The Additional Word-List includes 18 word-groups which fit to Swadesh's list of 200 items of basal vocabulary and 10 to Bender's list of 100 items, correspondingly. Two groups (33,34) are connected with family relationships, three groups (17, 42, 51) with tools or weapons, two (3, 58) with the making of threads and textiles, and three (23, 45, 48) with agriculture or domesticated animals. From the 100 most commonly used

Finnish words, three stems (6, 16, 63) belong to the Additional Word-List. The frequency of these words is 1.4% in total.

Finally, I dare to present some conclusive comments shortly. The works of Bouda (1953), Illič-Svityč (1965), Tyler (1968), and Collinder (1977) reviewed before and the works of Bomhard and Kerns (1994) and Koskinen (1996) reviewed here as well as my both word-lists shape a picture which has remarkable similarities of the form despite of several discrepancies in the details. The distant genetic relationship between the Dravidian, the Uralic and the Altaic languages seems to be probable. This group is identical with the eastern branch of Nostratic proposed by Illič-Svityč (1965). The relationship between Dravidian and Uralic is quite close and near the mutual distance between the most distant Uralic languages.

Regarding the relatedness of Japanese with the just-mentioned group of Dravidian, Uralic and Altaic the study of Kazár's (1980) refers to a distant relationship. My own study, its fair compatibility with Kazár's work as well as the work of Martin (1966) lend support to the Kazár's concept. However, the connection with Japanese is more complicated than between the three first-mentioned language families. As generally known, Japanese bears traits of a mixed language: an Altaic component, a Pacific component, an overwhelming amount of Chinese loans, and in addition to these, perhaps some unraveled components. Despite of these problems, one can hold the relatedness of Japanese with the eastern branch of Nostratic nearly probable. This relatedness is, however, more distant, than the distances between Dravidian, Uralic and Altaic. Surprisingly, Altaic has more lexical similarities with Uralic and Dravidian than with Japanese.

Only the position of Quechua in the DURALJAN superfamily hypothesized by me has not got support from the studies reviewed or other recent studies. It is a thesis which will raise loud protests among the linguists. It would be difficult to comprehend the vast distribution of English or Spanish today without the knowledge of history. Does paleolinguistics necessarily need a historical evidence for accepting a relatedness between the languages studied? I will repetitively draw the readers' attention to this that the vast majority of the similarities between Quechua and e.g. Finnish are just the same

similarities which Finnish has with the other languages of DURALJAN group. I refer here to "the fixed-birthday problem" presented recently by Ramer and Hitchcock (1997) and their probability calculations. The number of the similarities between Quechua and Finnish (or with Baltic-Finnic or yet with Finno-Ugric) is nearly as numerous than these languages have similarities with Dravidian. It seems quite possible that Quechua is a creolinized branch of the core group of DURALJAN superfamily consisted of Dravidian, Uralic and Quechua itself. Of what kind is the position of Quechua in the Amerind superfamily supposed by Greenberg (1987) is a very complicated problem which I will leave to the specialist of the American languages.

Further large studies are needed not only on the area of the linguistics but also of the population genetics and archeology for the confirming of the DURALJAN hypothesis. I hope that my pilot-work would be an initiative impulse for more deep sounding and sophisticated studies.

## THE ADDITIONAL WORD-LIST

1. Proto-DURALJAN \**ala*- 'low, under, genitals'.

F *ala*- 'lower, under, sub-', *alhaalla*- 'down, below, at the bottom', *alhainen* 'low, lowly, common, base, vulgar', *alasti* 'naked, nude'.

E *alam* 'lower, sub-, under', *alatu* 'lowly, vulgar', *alasti* 'naked, nude', H *al* 'Unter-, unterer Teil', Selkup *iil*, *il* 'Boden das Untere'.

Tam *alkul* 'side, waist, pudendum muliebre' (DED 253).

M *ala* 'place between the legs, genitals'.

J *oriru*, OJ *oru* 'to come or go down, to get down, to descend', J *ori* 'sediment, dregs', *oroka* 'dumm, blöde'.

Q *alquča*- 'to mistreat', *alljochay* 'despreciar, insultar, hacer burla, violar a una mujer', *allja* 'falla, mella, lo no acabado'.

Note PU \* *ala* 'Raum unter, Unter-, das Untere' (Rédei et al 1986), PKJ \**ara(a)*, 'bare', \**ór*- 'down' (Martin 1966), Koskinen's (1996) item 13, and Kazár's (1980) item 362.

2. Proto-DURALJAN \**came* 'hemp, cloth'

F *hame* 'skirt, garment, tunic'.

Votic *ame*, ED *ame* 'ibid.', Mari *súme* 'Tuch'. Yurak-Samoyed *hama* 'Mutze'.

Tam, Malayalam *campaṭam* 'cloth' (DED 2344).

M *čamča* 'shirt'.

J *hame* 'Verschalung, bekleiden'

Note PU \**suma* 'Tuch, Mütze' (Rédei et al 1988) and Koskinen's (1996) item 128.

3. Proto-DURALJAN \**cermɜ* 'sinew, nerve, tendon'.

F *hermo* 'nerve'.

Mansi *tār* 'Wurzel'.

Dravidian *cir*- 'root' (Illič-Swityč 1965), Kuwi *hīru* 'root' (DED 2626).

Teleutisch *širi* 'Sehne'.

J *tsuru* 'Sehne, angeln'.

Note PFU \**sārɜ* 'Ader, Faser, Wurzel' (Rédei et al 1987), PKJ \**cur(u)* 'string' and P-Nostratic \*/*s/ira* 'sinew, tendon' (Illič-Svityč 1965).

4. Proto-DURALJAN \**ikā* 'age'.

F *ikā* 'age', ikuinen 'eternal, everlasting'.

E *iga* 'age', H *év* 'year'.

M *egyri* 'long time, ancient'.

J *ikiru*, OJ *ika* 'to live, to exist', *ikiiki* 'lebendig'.

Q *ika*, *ikacha* 'a cada rato, con detencion'

Note Kazár's (1980) item 124 and Nostratic connections.

5. Proto-DURALJAN \**iro-* 'to loose'.

F *irrota* 'to get loose', *erota* 'to separate', *irrottaa*, *erottaa* 'to loose, to separate'.

E *āra* 'loose, free', *eraldadu* 'to loose, to separate', *irduda* 'to loose, to separate'.

Tam *iri* 'to be destroyed, to flee away, to defeat' (DED 478).

Turkish *irig*, *irüg* 'zerbrochen'.

Note Proto-Nostratic \**er* 'to scatter, to be scattered, to be broken' (Illič-Svityč 1965) and set 51 in the original word-list.

6. Proto-DURALJAN \**itā-* 'to sprout'.

F *itāā* 'to sprout', *itu* 'sprout, shoot, bud'.

E *idaneda* 'to sprout', H *terēm* 'to come into being, to grow'.

Tam *itaṛ* 'petal', Malayalam *ita* 'sprout', *itaykkuka* 'to sprout' (DED 459).

M *edy-* 'to begin', *ösōx-* 'wachsen'

J *deru*, OJ *idu* 'to sprout, to come out'.

Q *ichiq* 'pequeno', *itay* 'aventajar'

Note Kazár's (1980) item 44 and group 7.

7. Proto-DURALJAN \**itā* 'east, left direction' (Sw 87 'left direction')

F *itā* 'east'.

E *ida* 'east'.

Tam *itai* 'left side' (DED 449).

Uigur *il* 'Vorderseite, Osten'

Q *ičūq* 'left direction'.

Note group 6 and Kazár's (1980) item 144.

7. Proto-DURALJAN \**ice* 'self'.

F *itse* 'self'.

E *ise* 'self', Mordvin *es*, *äs* 'self, own', Mansi *is* 'self'.

Telugu *eda* 'heart', Kannada *ede*, *edde*, *erde* 'chest, breast, courage' (DED 827).

Turkish *iç* 'das Innere'.

Note PFU *iče/ise* 'Schatten, Schattensee' (Rédei et al 1986), and Koskinen's (1996) item 45.

9. Proto-DURALJAN \**jāntʒ* 'tendon, string, cord'.

F *jānne* 'sinew, tendon, string, cord'.

Karelian *jānne* 'ibid', H *ideg* 'ibid', Yurak-Samoyed *jén*, *jénti* 'string'.

Tam *ēntu* 'to stretch out the hands' (DED 894).

J *ito*, OJ *ito* 'string, chord, thread, twine'.

Note P-Nostratic \**jān/t/ʌ* 'to stretch' (Illič-Svityč 1965) and Kazár's (1980) item 142.

10. Proto-DURALJAN \**yo-* 'interrogative and relative pronoun stem'

(Sw 46 'some').

F *joka* 'who, which, every', *joku* 'somebody, someone, anyone'.

E *iga* 'every, each', Mari *juz* 'someone, anyone'.

Tam *yā*, *yāvai* 'what or which things', Malayalam *yāvan*, *ēvan* 'who' (DED 5151).

M *yagun* 'what', Manchu *ya* 'which'.

Note PFW \**jo* 'der (die, das), irgendein, jeder' (Rédei et al. 1988), and P-Nostratic ?*ay-*, ?*ya-* 'interrogative and relative pronoun stem' (Bomhard and Kerns 1994).

11. Proto-DURALJAN \**yuwʒ-* 'to drink' (B 19, Sw 31 'to drink').

F *juoda*, FD *juuvva* 'to drink', *juoma* 'drinking', *juoppo* 'drinker, drunkard'.

E *juua*, Komi *ju-*, Hanti *já-*, H *i-* 'to drink'.

Tam *cūppu* 'to suck, to sip', Kui *jūpa* 'to suck, to absorb' (DED 2621 b).

J *you*, OJ *yopu* 'to become intoxicated, sich betrinken'.

Q *upya-* 'to drink, to drink alcoholic beverages'.

Note the high-grade similarity both in sound and meaning.

Note also PFU \**juke/ jule* 'to drink' (Rédei et al 1986) and Kazár's item 570.

12. Proto-DURALJAN \**koŋy* 'armpit'.

F *kainalo* 'armpit, axilla'.

E *kainal*, Udmurt *kun-al* 'ibid.', H *hón* 'ibid'.

Kan *kañkuṛ*, *kañkuṛa* 'armpit' (DED 1234).

Turkish *koj* 'Busen', Uigurish *kojyn* 'armpit'.

Note P-Nostratic \**koŋy* 'armpit' (Illič-Svityč 1965).

13. Proto-DURALJAN \**kayw-* 'to scoop, to dig, to stir' (Sw 28 'to dig').

F *kaivaa* 'to dig', *kaivos* 'mine, pit'.

E *kaeva* 'to dig', Mari *koem*, *kaem* 'to dig, to shovel'.

Malayalam *kayyil* 'laddle, spoon', Tulu *kailu* 'ibid.' (DED 1257).

Turkish *kazy* 'graben'.

J *kai* 'oar, paddle'.

Q *qaywi* 'to stir', *qaiwi*, *aiwi* 'mover cualcuier cosa'.

Note PFP \**kojwa-* 'graben, schöpfen' (Rédei et al 1986) and P-Nostratic \**khay* 'to scoop out' (Bomhard and Kerns 1994). Note also the pair Malayalam *ayavu* 'washing', Q *aiwi* 'lavar'.

14. Proto-DURALJAN \**kaya-* 'to dawn'.

F *kajo*, *koi* 'dawn', *kajastaa* 'to dawn, to shimmer, to loom'.

E *kajastada* 'ibid.', Mordvin *kaje* 'to come up, to appear', Mari *kaja-* 'to be visible', H *hajnal* 'dawn', Yenisei-Samoyed *kajja* 'sun'.

Tam *kāy* 'to grow hot, to rise', Malayalam *kayaṛuka* 'to increase' (DED 1458, 1255).

J *ka*, *-ka*, OJ *ka* 'day, daylight', *kaga*, *gaki* 'Schein, Glanz', *kaika* 'Effloreszenz, Irrlicht'.

Note PU \**kaja* 'sun, dawn' (Kazár 1980) and Kazár's (1980) item 152.

15. Proto-DURALJAN \**kalki* 'hair' (B 35, Sw 65).

F *kalki* 'hair'.

Mordvin *kalgo* 'shives'.

Gondi *kel* 'hair, feather' (DED 1973).

Turkish *qil*, *kyl* 'hair' (Illič-Svityč 1965), M *kilgasun* 'Schwanzhaar'.

Note P-Nostratic *kilk* 'hair', and Koskinen's (1996) item 113.

16. Proto-DURALJAN \**kārks* 'point, tip, peak'.

F *kārki* 'point, tip, peak'.

E *kārk* 'ibid.'.

Tam *kār* 'to be pungent, acrid' (DED 1466), Kan *kār* 'to bite' (DED 1474), Tam *kūr* 'to be sharp, sharpness, pointed edge', Malayalam *kūr* 'sharpness, point of an arrow' (DED 1898).

M *qurča* 'scharf', *qarqa-* 'kratzen'.

Note P-Nostratic \*/k/urA 'point, tip' (Illič-Svityč 1965) and the group 115.

17. Proto-DURALJAN \**kasa* b) 'corner, point, edge, a weapon'.

F *kasa* 'corner of the axe', *kasuri*, *kassara* 'brush hook',

Votic *kasari* 'great knife'.

Kolami *kaccī* 'sword', Gondi *kacci* 'ibid.' (DED 1096).

Kazak *kaša* 'meisseln', *kašau* 'Meissel'.

J *kado*, OJ *kado* 'corner, angle, point, edge', *katana* 'sword'.

Q *jasay* 'mellar, desportillar, abrir brecha', *k'asay* 'cortar etc.' (Middendorf 1970).

Note PFU \**kaca* 'end, point, tip, mountain' (Kazár 1980), PA \**kača* 'meisseln' (Räsänen 1969), and Kazár's (1980) item 154. F *kasuri* has been considered a slavica loan (Toivonen 1974).

18. Proto-DURALJAN \**kasw-* 'to grow, to increase'.

F *kasvi* 'plant, herb, vegetable', *kasvaa* 'to grow, to increase, to accumulate'.

E *kasvada*, *kasuda* 'ibid.', Mordvin *kasoms* 'ibid.', H *gaz* 'weed'.

Kan *kasa*, *kasava* 'weed, useless plant' (DED 1088).

J *kusa* 'grass, weeds', J, OJ *kusaki* 'trees and plants, vegetation'.

Q *kaspi* 'palo, medera, leña, tallo, leñoso; stick, club, ear of corn'.

Note PFW, PFU? \**kaswa* 'wachsen' (Rédei et al 1986) and Kazár's item 170.

19. Proto-DURALJAN \**kaxla* 'neck, jaws' (B 56, Sw 103 'neck').

F *kaula*, FD *kakla* 'neck'.

Karelian *kakla*, *kagla*, E *kael* 'ibid.'.

Tam *kavul*, Tulu *kauḷu* 'cheek', Parji *galva*, *gavla* 'jaw' (DED 1337).

Q *kakikīu* 'jaw'.

F *kaula* has been considered a Latvian loan (Toivonen 1974). Note also P-Nostratic \**k'aph-* 'jaw' Bomhard and Kerns (1994).

20. Proto-DURALJAN \**kesk3* 'center, middle'.

F *keski* 'center, middle'.

E *kesk* 'cente', Mordvin *keska* 'middle of the body'.

Kan *gejje*, Telugu *gajja* 'the groin between the belly and the thigh'(DED 1938).

Q *kuskan* 'center, middle', *kusku* 'Cuzco, capital del Tawantiasuyu', *josjo* 'centro'.

Note Koskinen's (1996) item 110.

21. Proto-DURALJAN \**kis3* 'fight, struggle' (Sw 47 'fight').

F *kisa* 'play, game(s), sports'.

E *kisa* 'noise, disturbance', *kiselda* 'to fight, to riot', H *késa* 'fight, struggle'.

Kan *kisur* 'to strife, to quarrel, to be very disagreeable' (DED 1511).

J *kisou* 'vie, struggle, fight, compete with'.

Q *kisuy* 'hacer ademanes con expression de ira, molestia'.

Note Kazár's item 199.

22. Proto-DURALJAN \**koye* 'moth,mosquito'.

F *koi* 'moth'.

E *koi*, Mari *koje*, Mansi *kij* 'moth'.

Gondi *kuge*, *gūge*, *guge* 'moth' (DED 1874).

Turkish *kūjā* 'Motte', Kirghiz *kujō*, Kazakh *kōjā* 'moth'.

J, OJ *ka* 'mosquito'.

Note PFU \**koje/koja* 'Motte, Wurm' (Rédei et al 1986) and Kazár's (1980) item 150.

23. Proto-DURALJAN \**koyra* 'dog, male' (B 18, Sw 30 'dog').

F *koira* 'dog, koiras 'male'.

E *koer* 'dog', H *here* 'male, testis', Yurak-Samoyed *hóra* 'male, bull'.

Tam *kūraṇ* 'dog' (DED 1901).

Proto-Altaic *gōrḷ* 'antilope' (Illič-Svityč 1965).

Q *quruta* 'testicles', *kuruta*, *yorota* 'testiculo'.

Note PU *\*koj(e)ra* 'Männchen' (Rédei et al 1986) and P-Nostratic *\*gojra* 'antilope' (Illič-Svityč 1965).

24. Proto-DURALJAN *\*korw-* 'to burn', (B 12, Sw 19 'to burn')

F *koro* 'canker', *korventaa* 'to burn at the surface, to scorch, to singe, to grill'.

E *kōrvetada* 'ibid.', Mordvin *kurvams* 'to flame, to blaze up), Selkup *kuurra* 'sengen'.

Tam *kuru* 'horripilation, prickly heat, pustule, boil, sore' (DED 1780).

Manchu *guru* 'to become inflamed'.

Note PFW, PFU?, PU? *\*korpe-* 'brennen, verbrannt werden' (Rédei et al 1986) and P-Nostratic *\*gwar-* 'to be hot' (Bomhard and Kerns 1994).

25. Proto-DURALJAN *\*koki* 'hook'.

F *koukku* 'hook'.

E *kook*, H *kajkó* 'hook'.

Tam *kokki*, Malayalam *kokka* 'hook, clasp crook', Telugu *kokki*, *koñki* 'hook', Kui *kongoni*, *kengeri*, *kingiri* 'bend, curved, crooked' (DED 2032).

J, OJ *kagi* 'hook'.

Q *jenjo* 'curvo, retuerdo, torcido', *qinqu* 'bended, curved'.

Note Kazár's item 156 and group 163 in the original word-list.

26. Proto-DURALJAN *\*kulu-* 'to be worn (away), to become worn-out'.

F *kulu* a) 'worn-out', b) 'costs', *kulua* 'to be worn (away), to become worn-out, to fray etc.', *kuluttaa* 'to wear, to fray'.

E *kuluda* 'ibid.', H *hull*, *hul* 'to fall (down)'.

Kan *kūlu* 'to fall down, to be destroyed, ruined, Telugu *kūlu* 'to fall down, to die', *kūl(u)cu* 'to cause to fall, to kill' (DED 1907a).

M *gula-d* 'abrutschen', Kazak *kula* 'herabfallen'.

Note P-Nostratic *\*/k/ulʌ* 'to be crushed, to come down' (Illič-Svityč 1965).

27. Proto-DURALJAN *\*kurki* 'crane'.

F *kurki* 'crane'.

E *kurg*, Mordvin *kargo*, Selkup *kara* 'crane'.

Tam *kuruku* 'heron, stork, crane', Malayalam *kuru* 'heron' (DED 2125).

Tungusic *karav* 'crane'.

J *kari* 'Wildgans'

Note P-Nostratic \**k'ur* 'crane' (Bomhard and Kerns 1994) and Kazár's item 167.

28. Proto-DURALJAN \**kurku* 'throat, neck'.

F *kurkku* 'neck, throat', *kurkottaa* 'to stretch, to reach a thing'.

E *kurk* 'neck, throat', Mordvin *korga* 'neck'.

Tam *kural* 'throat, windpipe', Malayalam *kural* 'throat', Konda *koṛokla* 'the Adams apple' (DED 1774, 2150).

J *guratsuku* 'schwanken, wanken'.

Q *kurku-* 'to bend over, to bend down', *qurqurya* 'to goggle'.

Note Proto-Nostratic *g'wur-* 'to swallow, neck, throat' (Bomhard and Kerns 1994) and \**gura* 'throat' (Illič-Swityč 1965).

29. Proto-DURALJAN \**kuku-* 'to be squatting'.

F *kyykkiä*, *kykkiä* 'to be squatting', *kyykky* 'squatting position'.

E *kükk*, H *guggol* 'ibid.'.

J *kuguru*, OJ *kuku* 'to dive, to pass under'.

Q *kukus* 'codo, tobillo', *kukoq* 'agachado'.

Note Kazár's item 221.

30. Proto-DURALJAN \**lamu* 'pond, pool'.

F *lampi*, *lammikko* 'pond, pool'.

E *lammikas*, *lomp* 'pond', H *láp*, Yurak-Samoyed *lympad* 'swamp, marsh'.

Tam *nama*, *namar*, *nañu* 'to become damp, moist' (DED 3594).

Proto-Altaic \**lāmu* 'see' (Illič-Swityč 1965).

Note P-Nostratic *la/H/ml* '(muddy ) pool' (Illič-Swityč 1965).

31. Proto-DURALJAN \**lonka* 'to bend'.

F *lonkka* 'hip, haunch, coxa'.

E *lonkida* 'to jog, to lumber'.

Tam *toñku* 'to hang, to be suspended', Tel *toñgu* 'to bend to lie down' (DED 3478).

Teleutish *tōñtök* 'Schenkel'.

Note P-Nostratic *\*ton/k/ɿ* 'to bend' (Illič-Swityč 1965).

32. Proto-DURALJAN *\*mārā* 'wet', (B 94, SW 183 'wet').

F *mārkā* 'wet, moist, pus'.

E *mārg* 'wet, moist'.

Tam *māri* 'water, rain, shower, cloud', Malayalam *māri* 'heavy rain' (DED 4819).

Proto-Altaic *\*mōrā-* 'water' (Illič-Swityč 1965).

Note P-Nostratic *\*m/āh/rɿ* 'water' (Illič-Swityč 1965).

33. Proto-DURALJAN *\*miñā* 'daughter-in-law'.

F *miniā* 'daughter-in-law'.

Lappish *mannje*, Komi *món*, H *mēny*, Tavgi *menj* 'ibid.'.

Tel *mēna* 'connected through a woman's brother or man's sister', Kodagu *mayma* 'daughter-in-law' (DED App. 53a,b).

J *omina* 'woman, young woman, girl', *me*, *mesu* 'female', OJ *me* 'female, woman, girl'.

Note PU *\*miñā* 'Schwiegertochter, junge Frau' (Rédei et al 1986) and Kazár's item 257.

34. Proto-DURALJAN *\*muca* 'sweetheart'.

F *mutsu* 'bride, young married woman'.

Karelian *mutšo* 'ibid.', E *mutsu*, *mutt* 'wife, married woman', *musu* 'kiss', Komi *modž* 'friend, female friend', H *muci* 'sweetheart', *mucog-* 'to flirt'.

Tam *muṭṭu* 'need, want', *muttu* 'kiss' (DED 4936, 4960).

J *mutsu-* 'intimate, friendly, affectionate', OJ *mutu* 'intimate, friendly'.

Q *mučuy* 'lack, want, need', *muchay* 'besar, pedir, adorar, renerar, honrar'.

Note Kazár's item 289.

35. Proto-DURALJAN *\*ñori* 'young'.

F *nuori* 'young, youthful, lithe'.

E *noor* 'young'.

Tam *ñāru* 'to appear, to arise', *nāru* 'to sprout', Malayalam *ñāru* 'young plant fit for transplanting' (DED 2919).

Turkish *yavru* 'young'.

Note P-Nostratic *\*n/o/grɿ* 'young' (Illič-Swityč 1965).

36. Proto-DURALJAN \**oka* 'thorn, spine, prick'.

F *oka* 'thorn, spine, prick'.

E *okas* 'ibid.'.

Tam *ukir* 'finger-nail', Kan *ugur* 'nail' (DED 561).

Manchu *uka*, *nuka* 'thorn', Old Turkish *oq* 'arrow'.

Note Koskinen's item 31.

37. Proto-DURALJAN \**pāru* 'belly, plump'.

F *paara* 'short and bulky person', *paaristua* 'to grown fat'.

Tavgi *fār* 'bladder, vesica'.

Tam *paru* a) 'to become large, bulky', b) 'pimple, pustula, boil, to swell, large, bulky', Malayalam *paru* 'gross, big', *parukka* 'to grow bulky, stout', Kann *hari* 'a mass, multitude' (DED 3972, 3974).

J *hara*, OJ *para* 'abdomen, belly, bowels', *hareru* 'to swell up, to become swollen'.

Note Kazár's (1980) item 77.

38. Proto-DURALJAN \**parsi* 'bridge'.

F *parsi* 'beam, spar, loft'.

E *pars* 'ibid'.

Tam *po.ri* 'bridge, stripe of land between sea and lagoon' (DED 4557).

J *hari* 'beam, cross-beam, bridge'.

Note also the set F *harju*, Pengo *hara*, Telugu *sāruva* 'bridge' and Kazár's (1980) item 80.

39. Proto-DURALJAN \**perä* 'end, rear, back end', (Sw 6 'back').

F *perä* 'end, rear, back end, back'.

E *pāra* 'ibid.', Mansi *pār* 'zurück'.

Tam *puram*, *puran* 'back', Malayalam *piraku* 'the backside, after', Kannada *pire* 'the posteriors, buttocks' (DED 4205).

Manchu *fere* 'bottom, floor'.

J *hiretsu* 'Niedrigkeit, Gemeinheit', *hirefusu* 'sich niederwerten'.

Note PFU \**perä* 'Hinterraum, Hinterteil' (Rédei et al 1987), Koskinen's (1996) item 227, and P-Nostratic \**perl* 'border' (Illič-Swityč 1965).

40. Proto-DURALJAN \**pir-* 'to turn'.

F *piiri* 'circle, round, circuit, sphere, district'.

E *piir* 'ibid', Mordvin *pirams* 'to encircle', Selkup *pōr, pūr* 'ring, round, wheel, circle'.

Tam *piri* 'twist, strand, wisp', Malayalam *piri* 'a twist, twining', Tulu *piri* 'twist, spiral thread' (DED 4177).

M *ergi-* 'to turn, to move around, to revolve'.

Note PFW, PU? \**pire/pirä* 'Kreis, Ring, umgeben, umgrenzen' (Rédei et al 1987) and P-Nostratic \**p/h/ir-/ p/h/er-* 'to turn, to twist' (Bomhard and Kerns 1994).

41. Proto-DURALJAN \**pula* 'red, red berry', (B 64, Sw 116 'red').

F *puola, puolukka* 'cowberry, lingonberry'.

E *poolas, poolakas*, Komi *pul, puv, pú* 'ibid.', Mansi *pul, pil* 'berry'.

Tam *pular* 'to dawn' (DED 4305).

M *hulān* 'red'.

Note Koskinen's (1996) item 226.

42. Proto-DURALJAN \**pura* 'puncher, chisel'.

F *pura* 'puncher, chisel, drillerbore'.

E *purask* 'puncher', Mansi *purä* 'awl'.

Tam *purai* 'hole, tube' (DED 4317).

Turkish *bur* 'drehen, bohren'.

J *horu*, OJ *poru* 'to carve, to chisel, to dig, to excavate'.

Note PU \**pura* 'Bohrer, bohren' (Rédei et al 1987), Proto-Nostratic \**bur-/bor-* 'to bore' (Bomhard and Kerns 1994), and Kazár's (1980) item 113.

43. Proto-DURALJAN \**sawa* 'staff, pole'.

F *sauva* 'staff, pole, rod', *sapilas* 'a long pole for bearing'.

E *sau* 'staff, pole', Hanti *suw* 'staff', Mansi *suw* 'ibid.'.

Tam *capam, cavam* 'bamboo', Kannada *capa* 'bamboo cane' (DED 2330).

J *sao*, OJ *saw* 'pole, rod, beam'.

Note PFU \**śawŋa* 'Stab, Stange' (Rédei et al 1987) and Kazár's (1980) item 389.

44. Proto-DURALJAN \**selkə* 'back, beam' (Sw 6 'back').

F *selkä* 'open water, back, ridge, beam'.

E *selg* 'ibid.'.

Tam, Tel *callu* 'to sprinkle water' (DED 2384), Malayalam *callam* 'boatmans pole' (DED 2380).

M *selbe-ji* 'sich auflösen'.

Note P-Nostratic \**sel/k/ɹ* 'loose, slack' (Illič-Swityč 1964).

45. Proto-DURALJAN \**sika* 'hog, pig, swine'

F *sika* 'hog, pig, swine'.

E *sigä* 'ibid.', *sigurik* 'a young pig'.

Kan *cigari*, *cigare* 'black buck or antelope' (DED 2504).

J *shika*, OJ *sika* 'deer, Hirsch, Reh'.

Note Kazár's (1980) item 406.

46. Proto-DURALJAN \**süksə* 'autumn, harvest-time, cool air'.

F *syksy*, *syys* 'autumn, fall'.

E *sūgis*, Mansi *tüks*, H *ös* 'ibid.'.

Kan *suggi* 'the season of gathering a crop of any kind, Tulu 'the second rise-crop, harvest', Gondi *sugge* 'harvest' (DED 2647).

J *sugashii*, OJ *sugasi*, *suga-sugasi* 'erfrischend, frisch (Luft)'.

Q *soqsiy* 'rebuscar, buscar mucho', *sukuki* 'torbellino, huracán'.

Note PFU? \**sikse/sükse* 'autumn, harvest time' (Rédei et al 1987), and Kazár's (1980) item 432.

47. Proto-DURALJAN \**talya* 'skin, pelt, hide' (B 72, Sw 137 'skin').

F *talja* 'skin, pelt, hide, fleece'.

Karelian *tal̄̄a* 'ibid', Yurak-Samoyed *tāi*, *taí* 'scalp', Selkup *tuja*, *tuuja* 'Haar'.

Tam *talai* 'head, top', Kuwi *tala* 'hair', Malto *tali* 'hair of head' (DED 3103).

M *tolugai* 'head, hill'.

Note PU \**talja* 'Haut, Fell' (Rédei et al 1988) and Koskinen's (1996) item 159.

48. Proto-DURALJAN \**tarxa-* 'to plant, to cultivate'.

F *tarha* 'yard, cattleyard, inclosure, enclosure, plantation, farm', *taro* 'cultivated land, village'.

E *tara* 'yard, cattleyard, inclosure, enclosure', *taru* 'beehive'.

Gondi *tarcānā*, *tarsk* 'to scrape, to plane' (DED 3146), Tam *taṛai* 'to sprout, to flourish, to grow luxuriant', Malayalam *taṛa* 'to shoot', *taṛekka* 'to shoot, to sprout' (DED 3119).

M *tari-* 'to sow, to plant, to plow', *tariḷala-* 'to cultivate'.

Q *tarpu-* 'to plant, to cultivate', *tarpu* 'planting, cultivation, crop; sembrar'.

Note PFU *\*tar3/tor3* 'Nähe, Umgebung' (Rédei et al 1988), and Proto-Nostratic *\*thar-* 'to scratch' (Bomhard and Kerns 1994).

#### 49. Proto-DURALJAN *\*tāwōe* 'full'.

F *tāysi* 'full', *tāysin* 'fully, completely, totally, wholly'.

E *tāis* 'full', Mari *tič* 'voll', H *tele*, *teḷi* 'voll, gefüllt'.

Tam *tava* 'much, intensely', Kan *tave* 'abundantly, completely' (DED 3106)

Q *tawqa* 'to pile'.

Note PFU *\*tāwōe* 'voll' (Rédei et al 1988) and Proto-Nostratic *\*thaw* 'to swell' (Bomhard and Kerns 1994).

#### 50. Proto-DURALJAN *\*temp-* 'to wrench, to pull with force'.

F *tempoa*, *temmata* 'to wrench, to pull, to jerk', *temmellys*, *tiimellys* 'tumult', *temppu* 'stroke, exercise, trick etc.'.

E *tōmmata* 'to pull, to drag', H *tép* 'to pluck, to pull, to tear out'.

Tam *tempu* 'physical strength, energy', Tel *tempu* 'boldness; senseless person' (DED 3416).

Turkish *temsil* 'performance'.

J *tsubureru* 'to become crushed, zusammenbrechen, zerbrechen'.

Q *timpu* 'herir aqua, enojarse, latir', *timpuchiy* 'desmenzar', *timina* 'persona incorrigible, desobediente, rebelde'.

Note PKJ *\*teNbi-* 'to jump' (Martin 1966), Kazár's item 38 and Nostratic connections.

#### 51. Proto-DURALJAN *\*terä* 'cutting edge, point' (Sw 133 'sharp').

F *terä* 'cutting edge, blade, cutter, point, tip', *terävä* 'sharp, keen', *teräs* 'steel'.

E *terä* 'cutting edge etc.', *terav* 'sharp', H *tor* 'dagger, poignard'.

Tam *tura* 'to tunnel, to bore', Kan *turi* 'to hollow, to bore, to drill etc.' (DED 3339).

J *tsurugi* 'sword, sabre, blade'.

Q *turpui* 'punzar, picar', *turpuna* 'todo instrumento para punzar'.

Note PFU *\*terä* 'Schneide, Spitze (Rédei et al 1988), Kazár's (1980) item 520, and high-grade similarity in meaning.

52. Proto-DURALJAN *\*tena-* 'kid, brother, sister'.

F *tenava* 'youngster, kid'.

Tam *tuñai* 'association, company, friend, husband, wife', *tuñaiwan* 'husband, friend, brother, cousin', Malayalam *tuñavan* 'friend' (DED 3308).

Q *tinki* 'par des cosas iguales'.

Note Proto-Amerind *\*t'ana* 'child', considered an example of Amerind innovations (Greenberg and Ruhlen 1992).

53. Proto-DURALAJAN *\*ti* 'street, road', (B 65, Sw 120 road).

F *tie* 'road, way, path, route, career ect.', *tietää* 'to know'.

E *tee* 'road, way etc.', Komi *tui* 'ibid.'.

Tam *teru* 'street, highway' (DED 3422).

J *-chi*, *michi*, OJ *ti* 'way, path, track, road'.

Q *ichi*, *ichii* 'paso'.

Note Kazár's (1980) item 37.

54. Proto-DURALJAN *\*toka-* 'to stick, to stab', (Sw 150 'stab', 153 'to stick').

F *tokata*, *tökätä*, *tökkiä* 'to stick, to push, to strike, to poke'.

Karelian *tšokata* 'to stick', H *gyak-* 'to pierce, to stab'.

Malto *tuke* 'to push, to remove', Kan *dūku* 'to push' (DED 3286)

J *tsuku*, OJ *tuku* 'to pierce, to thrust, to spear, to stab, to poke'.

Q *tuksi-* 'to stick, to stab, to point at', *tuqsina* 'cosa que punza'.

Note Kazár's (1980) item 511.

55. Proto-DURALJAN *\*tuk-* 'to become suffocated, to stop'.

F *tukehtua*, *tikahtua* 'to become choked, suffocated', *tukkia* 'to stop'.

E *tukkida*, *tükkida* 'to plug (up)', H *tikkad* 'to grow languid, tired, exhausted, weary', *dug-* 'to stop up'.

Tam *tikai*, *tikaippu* 'asthma' (DED 3208), *takai* 'to stop' (DED 3006).

J *tsukiru*, OJ *tuka* 'to become exhausted', J *tsukaeru* 'to be obstructed, choked, stopped up'.

Q *tukuy* 'acabar, terminar, concluir, poner fin'.

Note Kazár's item 506.

56. Proto-DURALJAN \**tulla* 'to come, to arrive at', (B 16, Sw 23 'to come').

F *tulla* 'to come, to arrive at, to become etc.'.

E *tulla* 'to arrive at, to become', Mari *tola-* 'to come', Yurak-Samoyed *to-* 'kommen'.

Tam *tolai* 'to become extinct, to perish', Malayalam *tulayuka* 'to be at an end, to die', Telugu *tolāgu* 'to move, to go off, to terminate' (DED 3519).

M *tul-* 'to touch, to lean on, to reach'.

Note PU \**tule* 'kommen' (Rédei et al 1988), Proto-Nostratic *t'ul* 'to come to' (Bomhard and Kerns 1994), and Koskinen's (1996) item 174.

57. Proto-DURALJAN \**toxe-* 'to bring'.

F *tuoda* 'to bring, to carry, to deliver etc.', *tuottaa* 'to produce, to cause, to bring etc.'.

E *tuua* 'to bring etc.', Mordvin *tujšms* 'to bring', Yurak-Samoyed *taa* 'to bring, to give'.

Tam *tālu* 'to bear, Kannada *tāl*, *tālu* 'to hold, to take, to obtain, to have' (DED 3188).

Turkish *tavar* 'Habe, Gabe, Tribut'.

J *mitsugu* 'to support, to finance', OJ *tuki* 'tribute, taxes'.

Note PU \**tole* 'bringen, holen, geben' (Rédei et al 1988), P-Nostratic \**t'uw-* 'to give' (Bomhard and Kerns 1994), \**to/H/ɿ* 'to give' (Illič-Swityč 1965) and Kazár's (1980) item 502.

58. Proto-DURALJAN \**wyō* 'belt, girdle'

F *vyō* 'belt, girdle'.

E *vōō*, H *öv*, *ō* 'ibid', Selkup *tjüü* 'Gürtel'.

Tam *yā* 'to tie, to bind' (DED 5149).

J *obi*, OJ *obi* 'belt, sash, girdle'.

Note PU \**jāje* 'Gurt, Gürtel' (Rédei et al 1986), Koskinen's item 260, and Kazár's (1980) item 347.

59. Proto-DURALJAN \**ūdū*- 'marrow, brain'.

F *yđin*, FD *yty* 'marrow, medulla, nucleus, core, kernel'.

E *üdi*, Mordvin *udime*, Komi *vem*, H *velo*, Selkup *kütü* 'marrow'.

Tam *mitaṛ*, Kannada *miduḷ*, Telugu *medaḍu* 'brain', Gondi *medur* 'marrow' (DED 5062).

J *atama* 'head, brain, mind', OJ *atama* 'fontanelle'

Q *ñuqtu* 'brain'.

Note PFU \**wiḍs(mʒ)* 'Knochenmark, Gehirn' (Rédei et al 1988), Kazár's (1980) item 29, the group 225 in the original word-list and possible Nostratic connections e.g. A *marrow*, Latin *medulla* etc.

60. Proto-DURALJAN \**ünnʒ* 'to think, to count'.

F *ynnä* 'and, with', *ynnätä* 'to count together, to think'.

Karelian *ünnä* 'wholly'.

Tam *uṇṇu* 'to think' (DED 727).

M *ono-* 'zählen', *onu-* 'verstehen'.

Note Koskinen's (1996) item 42.

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